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AGRICULTURAL.

Concentration of Capital.

The most notable characteristic of the present time is the extent to which all kinds of manufacturing and commercial business has gone into the hands of large establishments under one management and welding enormous capital. This is to a great degree a necessity, for all the most successful manufacturing enterprises require machinery altogether too expensive to be conducted by men with small capital. With this expensive machinery there has been a great cheapening of all manufactured products that has been in the main a benefit to the world, even though it often involves for the time individual hardships by the closing out of smaller enterprises where only hand labor can be employed. This requires the redistribution of labor, those who are thrown out of employment learning to earn their living at something else, and enjoying as consumers the much cheaper product that they can no longer compete in producing.

Until very recent years most of this massed capital was owned by European capitalists, and it enabled them to control the market for all kinds of manufactured goods. It was against this concentrated capital, quite as much as against cheaper foreign labor, that the tariff was made to protect American industries from ruinous competition. By keeping capital profitably employed American workingmen were also benefited, as they are able under equal conditions to earn more than can the European laborer. This is shown at the present time. American wages are still much higher than they are in Europe, while the greater enterprise and superior machinery of our factories, and the greater efficiency of American workingmen, enables us to produce more cheaply than Europe can, and thus control the world's markets. This is especially true of our iron and steel manufactures, for which the mines of this country, being close to the surface give us an enormous advantage over those of Europe, which have been long worked and are now either nearly used up or worked so deeply that it is difficult to take out iron ore except at excessive cost. What is more our ability to produce iron and steel most cheaply means our ultimate control of all kinds of manufactures, for iron and steel are the main parts of all kinds of manufacturing machinery.

It has always been the hope of enterprising farmers to be able to adopt this policy of massing large capital in the purchase and working of land, so as to reap the benefit which they see from concentrating money in other lines of business. It is not easy for a man conscious that he is able to do great things if he only had the money to do with to be entirely content in cultivating "the little farm well tilled," and gaining only a modest competence, while he sees men with no better natural ability than his own, making enormous fortunes. It is this which is at the basis of much of the discontent which has drawn young men from the farm, and has led those older to sell their Eastern homes and buy large farms in the cheaper prairie lands of the West. For a time this change seemed to be profitable. On the large farm expensive grain-harvesting machinery could be used to much greater advantage than they ever could be on the small and often rough farms of the Eastern States. The result was that the Western farmer on new and cleap land crowded out the Eastern farmer as a grain grower, and obliged him to begin dairying, market gardening or fruit growing as the only available means of making his farm profitable. All of these require much more labor than did the old-fashioned grain farm, and they also made necessary the learning of many facts of which the grain-growing farmer had little knowledge. It needs skill to successfully grow small fruits or garden vegetables on a large scale. Those who have the most knowledge, and who have ability and will to use it, succeed in changing from farming to gardening.

While the Eastern farmer was making this change the Western grain grower found that his too cheap production of grain was rapidly exhausting soil fertility, and that he was himself in as bad straits as the Eastern farmer whom he had superseded. The truth is that ordinary farming, which means the production of crops from the soil, cannot be permanently run, even with large capital, on a very extensive scale. It means the certain depreciation of soil fertility, and this is a loss that no other gain can compensate. Yet there is abundant room for much larger capital in the management of the small farm, especially in these departments, such as producing butter or cheese, the evaporation of fruits and vegetables which are essentially in the nature of manufactures. Co-operative dairies and the establishment of canning factories for putting up tomatoes, corn and other vegetables, are, as every one can see, nothing but converting raw products into something more valuable. So, too, is, if we look at it rightly, the fattening of stock and even the production of milk from a dairy of cows. Most farmers have only money enough to keep a few cows, and they give to these few an amount of care that with better arrangement would be as easily given to twice or thrice that number. There is a gain in co-operative butter and cheese making, though it is partly offset by the necessity which obliges farmers at a distance from the factory to take their milk to it. It would obviously be better if the farmer who run a dairy could have money enough to keep one man all the time employed in caring for it. Instead of trying to get the cheapest help, he could then well afford to pay the higher wages that skill and thorough experience in his business should command. In the time coming there will undoubtedly be many more such farms with specialties, each requiring even on a small farm the expenditure of large capital in some branch of farm manufactures, and thus partly imitating the methods that have come to be regarded as necessary in the business world.

Spraying Potatoes.

As the leading money crop of Aroostook County, Me., is potatoes, and as it will so continue until we are forced into a more diversified agriculture by the sharp competition of New York and the West, or by the continuation of the exorbitant freight rates of the past, it is necessary for us to study every practical method of producing the crop with the least possible expense of labor by the use of machinery.

The question of fertilizers is also one of the greatest considerations. These two questions I will not dwell further on at this time, but may at some future time. In this communication it is my purpose to give my experience in the use of the Bordeaux mixture as a preventive of blight, rust and rot.

My plant of potatoes this year was 75 acres, composed of 25 seed varieties. On 15 acres there was applied about four cords of good, well-rotted manure per acre. On the balance there was applied from 700 to 1000 pounds commercial potato fertilizer. For three years I had been using a one-horse Aspinwall, two-rowed sprinkler. With this 50 gallons of the mixture would cover about one acre. The results were very satisfactory, each year largely increasing the yield by keeping the tops green and growing for 10 days or two weeks longer than where the mixture was not used. Each of these years three applications were made.

Although I was satisfied the increased yield more than twice paid the expense, yet I was not satisfied with the waste of material and the slow process of one man and a horse covering not more than eight or nine acres per day. Last spring I bought an Aspinwall four-rowed sprayer. With this, a 45-gallon barrelful of the mixture will cover two acres, and one man and horse can average 20 acres every day, while some days I have covered 25 acres.

This year I made six applications, though I did not commence quite early enough. The tops got so large that the spray did not reach the under leaves. The first application should be made when the tops are small enough, so that the mixture may reach every part of the vines, and thus be followed up with other applications at from five to eight days interval, according to conditions of the weather, but in no case let it exceed eight days.

In my Bordeaux mixture I use six pounds blue vitriol and five pounds quick lime, selecting lime barrels that have not air slaked. Forty pounds of lime are carefully slaked (not drowned) in a half hogshead. After standing half hour or more, it is thinned with water until it can be strained through a sieve, made by stretching a wire screen cloth tightly over a frame two feet square, and then covering the wire cloth with cotton cheese cloth. The wire prevents the cheese cloth from bagging down. One sieve will last for a whole season. If thinned sufficiently to run through the sieve readily there will be 50 gallons of the lime water, or enough for eight barrels of vitriol water. I use six kerosene barrels, filling them all with water.

Two hours before starting out with the sprayer, I weigh out six pounds of vitriol, put it into a burlap bag, and hang it over the edge of the barrel. It will dissolve much quicker this way than if put into the barrel and allowed to sink to the bottom. At the same time I put six pounds into a bag, and hang this into barrel No. 2. When the vitriol water is taken out of barrel No. 1 more vitriol is put into barrel No. 3, and when No. 2 is empty, then vitriol is put into No. 4, and so on. Every time the sprayer barrel is filled I put in five gallons of the lime mixture, after it has been well stirred up. I am sometimes asked if the wheels of the sprayer do not hurt the potato tops. My answer is no. I know they do not.

Now as to results. The Bordeaux mixture held the blight and rust back at least 10 or 15 days. Allowing 10 days extra growth (which I know I can reckon safely on), with an increase of 1½ barrels per day for each acre, on my 75 acres it would give me 1000 barrels in 10 days. At digging time I found in each case where a few rows had been skipped for experimental purpose that the increase where the applications were made was not figured too high. One thousand extra barrels potatoes were raised, worth $1000, at a cost of: 2250 pounds vitriol at five cents, $112.50, and labor $75, a total of $187.50, showing net profits obtained of $812 50. My average yield per acre was of market potatoes 182 bushels and of factory potatoes 30 bushels; total yield in bushels per acre, 212.

E E. PARKHURST.

Presque Isle, Me.

HAMPSHIRE DOWN WETHERS.

Dairy Notes.

While we are not yet ready to advocate the pasteurizing of cream for butter making as being desirable for general practice, we do not object to people making use of this method when they know where they can find customers for the pasteurized butter at a higher price than for the raw cream butter. The proprietor of a Kansas creamery said before the dairy association of that State last month, that he could make better butter and have it more uniform in quality by pasteurizing than in the usual way, and he has offers of a half-cent a pound more for pasteurized butter than he obtains for the other.

In his method he keeps the cream at 76° to 77° for the first six hours, then cools it to 68° or 70°, and leaves ice enough around it to bring it to 59° before morning. He said, "Pasteurizing insures uniform, clean-flavored butter. When fresh it appears rather flat and undesirable, but the flavor seems to appear in from one to two days, and keeps increasing for a long time." If this is the case invariably those who make their butter by this method will do well to hold it until it has ripened before putting it on the market. We have more than enough of butter that is "rather flat and undesirable" in flavor.

It has been claimed that a large proportion of the prize winners at the various dairy exhibitions, and even at many of the county fairs, have been graduates of agricultural colleges, dairy schools and dairy institutes. We do not doubt but that many of them are, especially in certain sections, but we doubt the "large proportion" being so. If they are we hope that in future they will strive to have the fact stated in the reports. If farmers read in their papers that first prizes were taken at each dairy contest by "John Jones, of Blank Agricultural College" or "Sarah Smith, graduate of Blank Dairy School," they may come to think that the teachings there are of a practical nature, and to desire that their sons and daughters shall avail themselves of the opportunity to acquire such knowledge.

We think there is good evidence that in those sections where dairy schools have been established or where competent instructors have been sent out to hold dairy institutes there has been an improvement in the quality of the dairy products made and sent to market, but we are confident that many of our best butter and cheese makers have graduated in the school of experience, though they may have added to their practical knowledge by reading or hearing the teachings of experts. It is easier to teach one who can already make good butter or cheese how to improve his products or to have his results more uniform than it would be to teach one who knew nothing about it how to make an article fairly good.

The U. S. Department of State has received an interesting communication from Consul Mahin at Reichenberg, Austria. He says: "If the price of American butter in Europe is no higher than European butter, the former should gradually win a large sale as its superiority becomes known. The first day after being made European butter may seem equal to the American product, but generally by the second or third day, it will have an old, strong taste and smell. The difficulty may be due to the practice of keeping cows in barns all the year, instead of turning them loose in pastures, as is done in the United States. Table butter sells here at about 30 cents a pound, cooking butter—which usually contains a small mixture of lard to make it keep better—sells at a few cents less. Prices are about the same the year round. The Austrian duty on butter is less than two cents per pound, and the freight per pound from America would probably be no more than the duty. If this be true, the good butter, which sells at an average price of 20 cents a pound, or less, in the agricultural districts of America could undersell Austrian butter here."

The learned writer who has contributed a series of articles to the Breeders' Gazette in favor of the "dual-purpose cow" fitted for producing both a large yield of milk and butter, and making good beef afterward, or fitted to produce good steers for beef, really ought to add another good quality to his cows when he breeds them. We have read of countries where they make their cows serve a triple purpose. They train them to work in the yoke during the day, milking them morning and night, and finally convert them into beef when past service for milking and working. They do not bother keeping a lot of oxen that give no milk, but expect the cow to do a day's work beside producing milk. We hope Mr. Shaw and other advocates of the milking, beef-making breeds will not stop short of going the whole figure while they are at their work, and show us how to make the cow useful in three ways at least, as if there is a little profit from the milk, the labor and the beef, they all may prove better than the one profit from a cow that has been bred and kept only as a milk or butter-producing machine. And only when we see this triple-purpose cow shall we abandon our faith in the single or special purpose breeds.

We do not mean to say that the man who breeds cattle for beef purpose should never milk his cows or use the milk, nor that those who keep and breed cows for dairy purposes should never convert them into beef, but the first must not expect much milk, and the latter need not hope to have his beef the best on the market or made at the least cost, and when either tries to depart from the type he has found fit for his purpose, he will lose in that direction all he would gain in another, as surely as he would if he yoked his cows and drove them in the cart or in the plow.

We have seen fakirs on the street and at agricultural fairs selling combination tools that could be used for a half-dozen or dozen different purposes, and in our younger days we have bought some of them. They would do all that was claimed for them, but they would not do any one thing very well, and we finally decided that it would be better and cheaper to have the screw driver, corkscrew, etc., in separate tools, each made for its particular use.

Not long ago a farmer told us that he thought it would have been money in his pocket if he had begun to feed his cattle at the barn a week or two weeks earlier, but the fields looked so green that he thought there was enough good feed there. Probably if he had left the question to the cows, and tested it by offering them some good hay at night, when they came up to be milked, they would have let him know that the pasture was not rich enough in nutritive qualities if it was sufficient in quantity. Frost-bitten grass has but little value, and we think the growth in the cold, wet and usually cloudy weather of the early spring and late fall is not as nutritious as that which grows from June to September, just as grass grown in a dense shade is less valuable than that which has the sunlight upon it.

Beginning to add a little hay ration to the pasture feed for a few weeks before the cattle are confined to the barn makes the change in character of food more gradual, and in this case, at least, and in many others, it would have prevented a shrinkage of 50 pounds weight on each animal, which it will take several bushels of grain to put back again. There were also some cold rains and winds in October and November when the cattle should have been in the barn or shed instead of in the pasture.

Snow and the Wheat Crop.

The fact that there has been a heavy snowfall the last of November through much of the wheat-growing region has an important bearing on the coming wheat crop, as we have already explained it has on the winter that is to follow. Such an amount of snow is not easily or quickly removed by natural means at this season of the year. It means probably more snow to follow, until the gradual increase of the sun's power after January removes it. But so far as the wheat crop is concerned, the present snow, as well as any that may follow it, are entirely favorable for its future growth. It is often said that the great danger to wheat is in winter. But it is not often realized that this danger is reduced to the minimum if a deep mantle of snow covers the surface of the ground while the weather is coldest. Wheat under even a light covering of snow is so well protected that it is not injured at all if the soil around it is frozen. Though the roots are fast in frozen soil there is no contact of the leaf with outside freezing air. It will come out from under the snow as green and bright as when the snow fell upon it.

This favor to the wheat crop is more notable the present year, because the generally dry weather at seeding time made a poor fall growth, and one that, with winters such as we have had of late years, would have been badly injured by alternate freezing and thawing. It is when frost alternately lifts the soil and the wheat roots also, and thawing lets the heavier soil back to its place, while allowing the wheat roots to stand above the surface, that the most damage is done. It may, indeed, prove an advantage if much snow comes, that wheat did not make a large growth last fall. Under a deep snow bank, even in winter, the ground will usually begin to thaw. This will thaw the lower strata of snow, and if cold weather follows, this freezes into ice, preventing the entrance of light or air from above. The result is that if there is a large growth of leaf the wheat plant is smothered and killed to the roots. If the leaf growth is small there is less need of air, as the plant has a reduced breathing apparatus.

All the bad effects of excessive snow on wheat may be averted if the owner of the wheat thus covered will go after the snow is thoroughly compacted and drive holes through the snow banks to the ground, which he will by this time usually find unfrozen. So long as the snow remains light and loose there is no danger from it, however cold the weather. Enough light and air will go through the snow to supply all the needs of the wheat plant. But so soon as snow begins to melt its rough angles are smoothed off, and the snow compacts almost as solid as ice. Probably about the same time the internal warmth of the soil begins to thaw the snow from beneath. Then is the time of danger for the wheat plant. If holes are made through to the ground they will probably enlarge by the warm air rising from beneath the snow bank, though they may drift full again when a fresh snow comes.

The greater difficulty of growing wheat of late years comes from snow drifting badly and even being swept from fields by winds, leaving the wheat exposed. Where wheat was sown as it used to be in a clearing in a forest the snow lay pretty evenly over it as it came, and in those days the early snow often lasted until the ground broke up in the spring. We have not had many such seasons lately, and to this it is due that there is always much complaint of winter killing every spring. But wheat is not easily killed so long as even the thinnest mantle of snow covers it, and where winds have not blown away the covering the present fall, prevalent as it is throughout most of the wheat-growing States, is likely to prove of great advantage to the country. The best of all is that this present snowfall will not probably interfere with freezing and thawing of the soil, which is an important aid in fitting it for plant growth the following season. Frost will penetrate through snow, provided it is not deep and compact, while the snow in contact with the leaves will prevent winds from exhausting their moisture.

Our Short Winter Days.

It is the inclination of the earth's equator to the ecliptic which causes the widest variations between summer and winter weather in both Northern and Southern hemispheres. In our Northern hemisphere the earth's surface is tilted away from the sun, so as to make its rays shine more slantingly towards it, and have less effect, while in the Southern hemisphere the sun's rays shine more directly on the earth, giving the people in that hemisphere the longer days and greater warmth of summer. This tilting of the earth is of the greatest importance in making it habitable. Were it to revolve evenly around its axis, as is sometimes supposed, there would be, both North and South, much less light and warmth in summer, and somewhat more of both in winter. In other words, far Northern and far Southern climates would be much less fitted for man's use than they now are. While people in summer are always complaining of the heat and in winter equally protesting against extreme cold, the condition which produces both enables mankind to inhabit and live in comfort in much higher latitude than would be possible if each man could fix up a climate to suit himself.

Man can, however, secure a much greater amount of sunlight than he now does by changing his residence alternately each six months from the Northern to the Southern hemisphere. Those who have wintered in Florida have noticed that through December and the fore part of January the days there are a full hour longer than they are in any part of New England. There are not many yet who cross the tropics so as to have the long days of our Northern summer all the year. Possibly in the future years wintering in Argentine or southern Chile for this continent and in South Africa for Europeans may become popular. But for the present all of us, and probably always for most such a change of residence would be undesirable. The best we can do is to watch the almanac closely and note the gain after the 21st of December, which is every year the shortest of the whole 365. But at this time the afternoons have been growing longer for a week or more. The sun sets as early on the second or third of December as it does any day in the year. Not until the 15th of December does it stay up a minute later. Nor does the rising sun make any change for the earlier until about the seventh day of January, when its long pause ends, and it begins to rise earlier. There is an old saying,

As the days begin to lengthen
The cold begins to strengthen.

This is hardly true in our climate, unless it applies to the lengthening of the afternoons through the last half of December. After a very cold December, the lengthening days in January are quite likely to accompany what is known as our "January thaw," which hardly ever fails in even the coldest winters.

It is hardly extravagant to say that at the time of the winter solstice, and for some weeks thereafter, there appears to be a contest between the forces of cold and darkness and those of light and warmth. There is even in winter a large amount of heated air rising from tropical regions and flowing towards the poles. It is the meeting of these warm currents with the, for a time, predominating influences of the Arctic cold currents that causes our winter snow storms. We usually think of snow and ice as bringing cold, as they do where the temperature is above freezing, It requires a great deal of heat to melt snow and ice into water, but while it remains unmelted the snow covers the earth with a blanket that protects the earth and vegetation from the severest cold. Nay, it even modifies the coldness of the blasts that pass over it. Everybody has noticed times when it is said "The weather is too cold to snow," and the beginning of snow storms is hailed as a sign that the weather is warming. Doubtless the blasts in contact with snow are made warmer. If they are dry, cold winds they reduce the bulk of snow by absorbing its moisture. The air may "feel" colder after this, because this moisture affects our nerves. But thermometers and vegetation will be less likely to be injured by winds that have blown over snow than by the dry blizzards of the arid West, that are much colder than the cold of regions where snow is plentiful.

Happily our New England section of the country is well enough supplied with water, so that if the weather is cold enough we have all the snow we want. The same applies to all the regions of the lower lakes, including the Champlain and the St. Lawrence valley. While the coldest storms go down the St. Lawrence they are much less cold passing over the river, which is often unfrozen for a part of the winter, than the same storm would be passing over high mountain regions. The air is dryer in the mountains and also usually less cold in winter, for the coldest air finds its way by preference through valleys rather than over the hills. Hence, it is not a mistake to build the house on the side of a hill, especially if the back of the hill protects it from the severest winds of winter. On level ground much the same protection of dwellings is secured by planting rows of hardy evergreens as windbreaks. This is often done in the far West, though in the arid region it is difficult to make such evergreens, however hardy, live through the winter. It is not altogether the cold air above ground that kills the trees. The soil being always very dry freezes so deeply that it prevents any sap from coming up to maintain the slight circulation which is found in all live trees, even during freezing weather. Not even a tree as hardy as the oak could live under such conditions, much less an evergreen, which has more foliage exposed to cold, drying winds.

Apples This Year.

More than one State has been benefited by the apple crop this year. The high prices have brought ample profits to those who had an abundance of good apples on hand to sell. The prices paid the farmers this year for good apples have averaged $2 a barrel, and in some regions the prices have run from $2 to $3 25 per barrel for very choice grades. It does not take long to figure out a good profit to the fruit grower when apples command such prices as these.

Speculators in apples are now relieving farmers of much trouble and bother in disposing of their crop. Agents make cash offerings for the fruit on the trees, and take all the care and worry of marketing them. If such offers are good it pays better than to attempt to handle the crop in regions where large markets are difficult of access. Several farmers in western New York sold their entire crop this season to big dealers at prices ranging from $2 to $3 per barrel, picked and delivered at the nearest railroad station. This is the most satisfactory method of selling the apples, for then one can calculate to the dollar how much he is going to make from his crop. On the other hand there is always the uncertainty of some mishap when the apples are picked and shipped away to be sold on commission. A thousand and one things may interfere to cut down the profits. In my experience I have found that the farmers who refuse reasonable offers for their fruit, in the hopes of securing better prices by shipping them personally to market, do not average as much profit as the man who tries to sell the fruit on the trees or delivered at the railroad station. Of course there are such things as bogus agents, who scour the country trying to get apples and other market produce at ridiculously low prices. It goes without saying that a fruit grower has got to have some business shrewdness in driving a bargain, and moreover he must keep in pretty close touch with the market conditions and the general supply.

I notice one good result of this movement to purchase the apples direct from the farms. The agents insist upon proper sorting and packing. They usually give pretty plain directions how this shall be done, otherwise the grower will not get the balance of his money. As there is no object for the farmer to mix good and poor varieties in one barrel, there is, as a rule, pretty conscientious efforts to live up to the agreements. Probably this will in time get all of us so in the habit of sorting and packing apples properly that we will do it when we prepare them for market to be sold on commission.

S. W. CHAMBERS.

New York.

A Protest Against Pharisaism.

Much that passes for righteousness among mankind is really due to the partial withdrawal from the world that leaves men less liable to some of the stronger temptations that assail men and women in our mortal life. It is the merely negative goodness. When it is boasted as virtue, as it commonly is, it indicates that the person who thus boasts ignores the true purpose of human life, which is to be helpful to our fellow men and women. There is some work for every human being, and if he or she refuses to do that work, the world must be kept back farther then it should or would be if fidelity to known duty was the rule of life for all.

Keeping aloof from mankind, drawing into one's shell, and closing it afterwards, is not the life of a human being, but of an oyster or a clam. Yet this seems to be the ideal of religious life for not merely thousands, but millions of people. There is less of this among Christian than among heathen nations, due, possibly, to the fact that the men whom the founder of Christianity most heartily denounced were reckoned by themselves, and also by the public, as much the most religious class of their time. Their religion consisted only in asceticism. They refrained from the grosser forms of sinning that others practised, and therefore they thought themselves perfect. Yet this did not prevent them from being harsh, grasping and unloving to those around them. Possibly this kind of sinning they prided themselves upon, as it marked their desire to exclude the mass of mankind from associating with them.

The idea that goodness consists in refraining from doing rather than in doing implies an extremely low ideal of life, which should be one of activity in some worthy cause. Work while the day lasts is the command to all, and if this is obeyed, while it may expose life to greater difficulties, and perhaps not leave it unscathed by sin, it is more nearly what a human life should be than the faultless character which is only so because it has been removed from the temptations that assail most men and women who are in the world.

Farming at the Experiment Stations.

The Dairy Cow.

Bulletin 81 from the Experiment Station at Manhattan, Kan., is devoted to the dairy cow.

It advocates having dairy cows come fresh in the fall, as the greatest yield is obtained in this way, if proper care, feed and shelter is given during the winter. The prices of butter are also higher in winter.

They give the monthly yield of a cow owned at the College Farm, in pounds of butter, for ten months, a total of 2827 pounds, and says if the cow had calved in April her product at the prices paid at a leading Kansas creamery would have sold for $44.80, while if she had calved Sept. 1 and produced an equal amount for ten months, it would have sold for $49 44, a gain of $4.64. But a cow which calves in the early fall on grass is in the best condition to make a high yield when fresh, and a good yield can be kept up through the winter by good feed and care, and when turned to pasture in the early spring there will be an increased flow that will considerably increase the year's yield.

Winter dairying avoids injury to flavor of butter from weeds in summer and fall pastures. The cows will be dry when heat, flies and drought are severest, and when butter prices are lowest. It will furnish profitable employment for the farmer and his men, when without it they would be idle or forced to work for low wages. Calves can be better raised and cared for in winter than in summer, and will not be troubled by heat, flies, sour milk and diarrhœa, and when weaned will go direct to green pasture without any check of growth.

They think with most cows the highest yield for the year is obtained by allowing the cow to go dry about two months before calving, but cows whose milk is low in butter fat may be such large yielders of thin milk as to make it difficult to dry them up.

To dry up a cow, reduce the feed, take away the grain, and when the milk yield drops milk first once a day, then once in two days, and in one or two weeks the average cow will be dry and her udder in good condition. But if she continues to give milk under this treatment, or if the udder is hard and feverish, stop trying to dry her up, change to a light milk ration, give her loosening foods and milk regularly.

Either ensilage or roots is good food before the cow calves, as is also alfalfa or clover hay. Corn and cornmeal should not be fed. A good grain mixture is two parts, by weight, of bran and one part linseed meal.

The cow that calves in winter should be in warm, comfortable quarters, free from draught, and it may be well to blanket her as soon as the calf is dropped, and keep her blanketed until she has regained her normal condition. Her bowels should be kept loose, and she should have light, loosening feeds and all the water she will drink, which should always have the chill taken off until the afterbirth has come away. If this does not come in 24 to 48 hours it should be removed by a competent man, as its retention causes a serious loss in the milk yield, which may continue through the entire milking season. If a box stall is kept for calving cows and a number are to calve in it, all bedding should be removed after each birth and the floor and sides disinfected with quicklime or solution of carbolic acid or corrosive sublimate. Unless the cow's milk is so rich as to scour the calf, they prefer to have the calf stay with her a few days.

If the udder is hot and caked, the cow should be milked at intervals of not more than two hours, and if much inflamed more frequent milkings are better. Do not milk dry while in this condition, as this would stimulate a fresh flow of milk and increase the fevered condition even to the fatal milk fever. If badly inflamed give physic, 1½ pounds of Epsom salts dissolved in warm water, and given from a long-necked bottle, is a dose for a cow of 1000 pounds live weight; if heavier or lighter increase or decrease in proportion. Applications of flannel cloths wet in water as hot as the hand will bear to the udder will assist, and should be kept up from 30 minutes to two hours. Rub the udder dry after this steaming, and if necessary repeat it after a rest, until the inflammation is gone. In very severe cases apply a poultice of coarse bran in a cloth suspended over the animal's hips, with holes cut that the teats may come through for milking. Keep the bran hot and moist by pouring hot water from cups into it. The milk should not be used while there is inflammation in the udder, but in ordinary cases should be fit in five days, though in exceptional cases it may not be all right for a month.

After the cow has recovered from calving, the feed should be gradually increased to the limits of profitable feeding for the first three months, and in many cases it will pay to go above that limit, as it will result in a longer season of milk production, and an increase all through the season. When she has passed the point of her greatest flow, the feed should be gradually reduced, taking care to keep her in moderate flesh, and further reducing rations as it comes time for her to go dry.

Many Kansas cows calve without proper shelter or care, with only ice water to drink, and they live and give milk. But cows so treated are not often profitable, and do not usually yield more than two-thirds as much in a year as a cow that has been properly handled.

They give a useful table of the amounts of digestible nutrition in various grains, green feeds, dry feeds and roots, showing the amount of protein, carbohydrates and fat in each, and say that a fair milk ration for a cow of 1000 pounds, live weight, should have in a digestible form about 2½ pounds of protein, 12½ pounds of carbohydrates and 4.10 pounds of fat. If there is too much carbohydrate and fat and too little protein, the cow cannot give a full yield of milk, but may dry up and fatten. They name as loosening feeds, alfalfa, sorghum, hay, ensilage, roots, bran and meal from soy beans, linseed and gluten. As constirating feeds, corn fodder, corn stalks, Kaffir corn fodder and grain, prairie hay or timothy hay, corn meal and cottonseed meal. These should be so used and combined as to keep up the proper condition of the bowels, not too loose and not constipated.

The cows like variety in their food and do best when they have it, and therefore mixed grains are better than all of one kind, even for the same nutrition, and mixtures of them give the animal better appetite and produce better results.

The soft or loosening foods in general have a tendency to make soft butter, while the constipating foods make the butter hard. This is another good reason for mixing them, and when one knows whether his customers want a hard butter to stand firm in a warm climate, or a softer butter that will spread in a cold place, by care he can provide just what they need.

Foods which give out any odor, or from which much dust arises should not be given until after milking is finished, as they may affect the milk as it is drawn. Spoiled, rotten or mouldy feed should never be given, as they taint the milk and butter. The cow should have only clean, wholesome food.

They give 100 different feeding rations of nearly equal value for producing milk, but much of the fodder named is but little used in the Eastern States, and we must defer the further condensing of this bulletin to another article.

Washington Agricultural Notes.

The general opinion here seems to be among those who have been in Puerto Rico that the products of the island will not to any great degree interfere with United States production. The agriculture is such as will not generally succeed in the United States, but on the other hand, the people consume largely of products which they cannot or do not grow, and which the farmers of the United States raise. It is difficult to get people of the tropics to raise any crop requiring much cultivation. Three crops of corn will grow in Central America on the same land within the year (one excellent crop, one medium and one crop of nubbins, according to the seasons and the rainfall), yet, because of the luxuriant growth of weeds and grass, requiring constant cutting and attention, the natives raise little corn, buying it largely from the Southern States, and paying high rates for freight.

The fruit growers of the Pacific coast are gradually getting the market away from those of Europe and the far East; yet not so very gradually, either. It was only a few years ago that cheap, poor prunes were shipped here in hogsheads from Germany in large quantities. Of late years not only have these cheap goods practically disappeared from America by reason of the competition of the Western prunes, but the price of this fruit to the consumer has also decreased. The California Association of Raisin Growers was able last year to control the output and prices of raisins. Two thousand two hundred carloads were sold, leaving 800 carloads on hand, and the average price received was 3.08 cents per pound. There is still one class of foreign raisins, however, which strongly competes with American-grown fruit; namely, the Zante currant, which is imported at very low cost. This is not a currant at all, but simply a seedless grape, and is gathered in southern Europe in great quantities, with the result that the fruit received here is filled with impurities, trash, etc. The Thompson Seedless and the Sultana raisins, with which this fruit comes in competition, are produced largely in southern California and prove a strong rival to but withal a much better article than the Zante currant.

The French Chamber of Deputies has under consideration a measure nearly quadrupling the duty on cotton-seed oil, which is imported in great quantities from this country for use in the manufacture of "olive oil." The proposed duty would be practically prohibitive. A copy of the measure has been laid before the Secretary of State, with a request that our Government make such efforts as may be proper in the protection of this leading American product from the proposed assault. The attention of members of Congress from the cotton sections is also being called to the subject, and it is thought that the passage of such legislation in France would be cause for retaliation by this country, and the increase of duties on French products imported into the United States. It is believed, however, that the matter will be first adjusted through the Department of State, and Secretary Hay will cause to be made known to the French authorities the reasonable expectation of this government that no such death blow will be given in France to cotton oil or any other American product.

Secretary Wilson has just submitted to the President, and it has gone to Congress for printing, a vast amount of information received by the Department of Agriculture from abroad, relating to the requirements of foreign purchasers for American horses. The secretary states that when he first became connected with the department he was impressed with the opportunity for American horses in Europe, and since then the department has been gathering information which will be useful to breeders desiring to export. The requirements in the various countries are widely different, and it would be obviously unwise to make shipments without knowing the exact needs and desires of the buyers. The secretary says that a study of the information received will convince any one that there is a real demand in Europe for good American horses.

Especially does he think this to be the case in Belgium and Germany. German statistics state that the imports of American horses during the first nine months of 1898 were more than double those of the corresponding nine months of 1897.

Official statistics show that the importations of American pork products into Germany for the first nine months of the present year have been more than double those of the corresponding period of 1897, and the agrarian papers insist that the German tariff should be so formulated as to entirely exclude American meat products from Germany. The German Berlin Tageblatt, speaking for German commercial interests, says? "We are anxious to ascertain whether the renewed attempts of the American Government to convince the Agrarians and the German government of the thoroughness of American supervision of pork exports, and the hygienic results of the drying process applied to American fruits, have been successful. We doubt it, for whatever does not put money into the pockets of our Agrarians, they do not believe in."

The common method for forcing asparagus is by transplanting mature roots to some warm place, as in hotbeds or under greenhouse benches. They are removed from the field in the late fall and stored in a cold place until wanted. The shoots so produced grow from material stored up in the roots the previous summer, so that when this reserve material is exhausted the roots are useless and must be thrown away. This is wasteful and expensive. A simple method of overcoming this difficulty is to place half barrels over clumps of asparagus in the bed early in the spring, and pile fermenting manure around them, the heat from the manure forcing the shoots into rapid growth. This in no way injures the roots. Another method is by placing frames covered with sash right over the plants in the bed. This is considered by gardeners a very good method. Another method, where the plants are in rows, is to dig ditches between the rows and fill them with fermenting manure, and also mulch the surface with manure. Other and various devices contemplating a steam and pipe plant are also used by professional gardeners on a large scale.

Analyses of potatoes show a water content of about 80 per cent., and that of the remaining 20 per cent., one per cent. of it are carbohydrates (starchy matter). Protein or nitrogenous compounds is present in only two per cent. This shows that the potato alone furnishes a very one-sided, unbalanced diet, which would probably prove unwholesome to most people. When eaten with meat, eggs, fish, etc., an evenly balanced, wholesome diet is secured.

The value of feeding skimmilk on the farm is perhaps not generally appreciated. Skimmilk is a highly nitrogenous food, the oil or fat having been removed in the butter. This can be supplied, however, cheaply by using corn. The Indiana station has recently made some interesting experiments on the use of skimmilk for young chickens. Two lots were taken and were given identical treatment, except that one had all the skimmilk they would drink. Those receiving the milk made a much more rapid and satisfactory growth than the others. The milk-fed chickens made an average weekly gain of 4.46 ounces; those receiving no milk, 2 62 ounces.

A great many farmers do not realize how much water cows need to give the best results in milk. It is not enough to give them all the water they want, direct and cold from the pump, at morning and in the evening. Cows will drink more and feed better if they can get water in warm, comfortable quarters. In addition to the water needed for rumination and digestion, at least 80 per cent. of the milk the cow gives is made from water. A good-sized cow in full milk should have at least five or six buckets of water daily, and if she has to drink them three at a time, it will not do her the most good.

GUY E. MITCHELL.

Washington, D. C.

The New South.

The United States Department of Agriculture computes the corn crop of 14 Southern States in 1898 as 583,127 000 bushels, which is an increase of 113,240,000 bushels over the crop of 1897. It also places the total crop of the United States at 1,926,000,000 bushels, or only 24,000,000 bushels more than in 1897, which would indicate a decrease of nearly 90,000,000 bushels in other States.

In two of the Southern States there is a decreased production of corn, Maryland and Georgia, and the gain is small in West Virginia, Florida and the two Carolinas. This may be attributed, in part, at least, to the greater attention being given in those States to fruit and market garden crops.

But the increased acreage and larger production per acre in other States indicates other changes in their general policy. It means a change in some of them to less cotton, rice and sugar cane and more corn. It shows better cultivation of their fields. It promises the growing and fattening of more beef and pork and poultry. It will result in their buying less of these products, if not in having more to sell. More cattle and more swine, and a more liberal feeding of corn insure larger manure heaps and increased fertility of their farms, and will create a demand for more and better labor.

Northern farmers will do well to heed these signs of the times, and prepare themselves for the years to come, when the Southern States, with a greater diversity of agricultural products, and better cultivation of the soil, will become a more serious competitor in our Northern and Western markets than they are now.

If they are getting out of their old ruts we must do the same, and try to find other markets and other products to sell in them. As we see the competition that we are having and the probability of its rapid growth, from our Canadian neighbors in the North and from the improved agriculture of the Southern States, we feel that the farmers in our Northern tier of States, and particularly in cold and rocky New England, must make every effort to prevent being crowded out between them. We have unbounded faith in Yankee capability, and in our citizens, who are Yankees by training if not by birth, whether they are in Maine, Ohio or Kansas, but we feel it our duty to warn them to be wide awake and doing their best, or those who were once far behind us in agriculture may be ahead of us soon.

Live Stock Notes.

We have so much faith in the principles of rotation of crops that if we were raising a hog crop, chicken crop, or even a crop of young stock every year we would not devote the same field to them many years in succession. A change of the hog pasture or calf pasture for a few years, and devoting the old place to some cultivated crop, and then putting it to grass and clover, might prevent some of the diseases that afflict those animals. In the poultry yard we produce the same change in the soil when we can by stirring it up, and perhaps growing a crop of oats or buckwheat on it when we can keep the fowl off it, and for this purpose we like to have such yards empty once in three or four years at least half the season of growth.

We think if our Western pork raisers would change their hog pastures more frequently they would have less trouble from hog cholera or swine plague, but many of them will not do so until they find their herd sick, and then they remove them to clean fields until they think the field has been disinfected by rain and frost, which is looking the stable door only after a part of the animals are gone.

In calf and cow pastures the danger is less, because of the larger range usually allowed those animals, but if they have favorite herding places it may be well either to fence them off one year or more and grow some crop on them, or to carry away the manure and top soil and replace it. Old-fashioned farmers used to grow crops of tobacco or turnips on the fields where the sheep were yarded in winter, not only for the sake of the crop grown, usually a good one, but for the cleansing of the land. If this practice was followed now we should probably hear less about epidemic and endemic diseases among our live stock.

Since we learned something of the value of corn ensilage for live stock we have not been an earnest advocate of growing roots for them. But we know they are good for the stock, and when one grows roots for the market there will be many unmerchantable ones to be used up at home. To those who have such or any roots to feed out we would urge the importance of having them cut up before feeding. They are eaten up more easily, and without danger of choking, which often occurs when cattle are trying to masticate whole roots small enough to get into the throat. We have known it to occur with beets, potatoes, and even with a small head of cabbage, and the animal was lost by the saving of the few minutes labor which would have been needed to cut them into some other than globular form.

We have cut roots a peck at a time in a tub or half barrel with a sharp spade when we had but one cow, and we have run them through a root cutter, and fed many bushels a day, when our flocks and herds were larger, and in either way, and whether to be given to cattle, horses, sheep, swine or poultry, and we have fed them to all, we thought the gain by cutting well paid for the labor. Of course, we could cut five bushels by machine as easily and leave them in better shape when we used the machine than we could the peck with the spade, but the last was a case of doing the best we could with the tools we had.

The Potato Season of 1898.

The year that is drawing to a close has been generally unsatisfactory in all sections for potato growers. Almost everywhere a moderately early spring was followed after the potatoes were in the ground with wet, cold weather, so that much seed rotted, and what grew made so slow a growth that it was hard to keep the weeds down. There were under these conditions few potato beetles seen early in the year, and these did not hatch out many larvæ. The potato beetles and larvæ were so few that careless farmers believed that they could do no harm to the crop. But they were undeceived when hot weather came, for in two or three days millions of larvæ hatched and entirely stripped many vines. That was the worst mistake that could have been made. In the cool weather after potatoes began to come up it would have been easy to destroy all the adult bugs, which on cold nights burrow in the ground just beside the potato stems, and these are sometimes eaten off just above the surface.

Thus beginning with injured foliage there followed in July a whole month of warm and wet weather, which caused potato vines to set a great number of tubers which, in most cases, grew to be of pretty fair size, where blight did not attack the vines. But potatoes thus grown lacked the carbonaceous matter to change their crude juices into starch. When it in most places f August, hot and suddenly, and t all that was Farmers who their potatoes covering them to dry them out quickly and never putting them in large heaps, but selling as fast as the potatoes were dry, for the price then was quite as high as it has been since. But wherever potatoes when dug were piled in pits they rotted down so quickly that the majority of growers, so long as the weather was fine, waited for the potatoes to ripen better in the ground. This, with no foliage to absorb carbonic acid gas from the air, could not be done. When rains came they made it more difficult to dig potatoes, and many growers who waited almost until November before digging found their crop very little riper than it was a month or six weeks before.

The result is that a great many poor, unripe and often scabby potatoes are in the market. There are some good potatoes with these, where the hills escaped the potato larvæ in July and were thus able to ripen the tubers. Those who fought the potato beetle early, destroying all the early beetles, had potatoes that were ready to market so soon as hot and dry weather destroyed the vines. In most cases these potatoes were so well dried out that their skins would not slip after they were dry, and therefore did not rot. While there are a great amount of poor potatoes this year, there are also a smaller proportion that are really good. It is very important for the potato crop of 1899 that only these good potatoes shall be used for seed. A scabby, unripe potato, or one that only ripened after digging, cannot make as strong a growth as one that was produced under the better influences of full foliage until the tuber completed its growth and the crop had been naturally ripened.

Doubtless also the wet weather that prevailed throughout July and early in August made a sappy growth of vine, that died down quickly when followed by hot and dry weather. During rains the sunlight is obscured. It is only when the sun is shining upon foliage, or at least while it is dry, that the leaves can most rapidly absorb carbonic acid gas. The failure of sunlight during the time when growth was most rapid has made a less desirable corn crop than would have been, though this was better remedied for the corn by the hot, dry weather that followed, as this did not destroy corn foliage except in a few cases in the far West where corn failure from drought occurs almost every year to some extent.

MAKING NEATSFOOT OIL

Every farmer who kills a beef should save all the feet and get the oil out of them. This is called neatsfoot oil, and is valuable for many purposes. Almost everybody understands how it is made. All that is needed after thoroughly washing the hoofs to remove dirt is to put them in water and keep the water boiling several hours, until all the oil rises. From the four feet of a full-grown beef we have made about a pint of neat's foot oil. Of course it is as much trouble to boil a few hoofs as it is to care for a great many, but neatsfoot oil is valuable enough to be worth saving, even if the feet of only one animal can be procured to extract it from.

The Irish Terrier.

Stonehenge, in speaking of the Irish terrier, says that "the head should be long, skull flat and rather narrow between ears, getting slightly narrower towards the eye; free from wrinkle; hardly visible, except in profile. The jaw must be strong and muscular, but not too full in the cheek, and of a good punishing length, but not so fine as a white English terrier's. There should be a slight falling away below the eye, so as not to have a greyhound appearance. Hair on face of same description as on body, but short (about a quarter of an inch long), in appearance almost smooth and straight; a slight beard is the only longish hair (and is only long in comparison with the rest) that is permissible, and that is characteristic. Teeth should be strong and level. Lips not so tight as a bull terrier's, but well-fitting, showing through the hair their black lining. Nose must be black. Ears, when uncut, small and V-shaped, of moderate thickness, set well up on the head, and dropping forward closely to the cheek. The ears must be free of fringe, and the hair thereon shorter and generally darker in color than the body.

Neck should be of a fair length, and gradually widening towards the shoulders, well carried, and free of throatiness. There is generally a slight sort of frill visible at each side of the neck, running nearly to the corner of the ear, which is looked on as very characteristic. Shoulders and Chest—Shoulders must be fine, long, and sloping well into the back; the chest deep and muscular, but neither full nor wide. Back and Loin—Body moderately long. Back should be strong and straight, with no appearance of slackness behind the shoulders, the loin broad and powerful and slightly arched, ribs fairly sprung, rather deep than round, and well-ribbed back.

Hindquarters—Well under the dog, should be strong and muscular, the thighs powerful, hocks near the ground, stifles not much bent. Stern, generally docked, should be free of fringe or feather, set on pretty high, carried gayly, but not over the back or curled. Feet and Legs—Feet should be strong, tolerably round and moderately small; toes arched, and neither turned out nor in; black toe nails are preferable and most desirable. Legs moderately long, well set from the shoulders, perfectly straight, with plenty of bone and muscle; the elbows working freely clear of the sides, pasterns short and straight hardly noticeable. Both fore and hind legs should be moved straight forward when traveling, the stifles not turned outwards, the legs free of feather and covered like the head, with as hard a texture of coat as body, but not so long.

IRISH TERRIER,
From the Book on "The Dog," Published by Walnut Pub. Co.

Positive Points.	Value.
Head, jaw, teeth and eyes	15
Ears	5
Legs and feet	10
Neck	5
Shoulders and chest	10
Back and loin	10
Hindquarters and stern	10
Coat	15
Color	10
Size and symmetry	10
Total	100
Negative Points.	**Value.**
White nails, toes and feet, minus	10
Much white on chest	10
Ears cropped	5
Mouth undershot or cankered	10
Coat shaggy, curly or soft	10
Uneven in color	5
Total	50

Disqualifying points: Nose, cherry or red in Brie color.

—The number of suicides throughout the world is said to be about one hundred and eighty thousand yearly. The greatest number happen in June, the fewest in September, and nearly one-half between 6 A. M. and noon.

Practical Poultry Points.

The Pekin duck was imported into this country in 1872, we believe, and from here it went to Great Britain in 1873. Its first use there was for crossing with what had been previously their favorite breed, the Aylesbury, and so well was the cross liked that it is said to be difficult to find now an Aylesbury duck at any price, even in flocks called pure bred, that does not show some Pekin characteristics.

As both breeds are pure white and of about equal size, it seemed that the cross might have been made without greatly changing the appearance of the flock, excepting by giving more vigor, and, perhaps, more rapid growth and earlier maturity; but, in fact, the vigor of the Pekin was so much the greater that all the distinctive marks of the Pekin went into the cross and do not seem to breed out, even where no Pekin blood has been used for several years.

The shorter and deeper head, shorter back, upright tail, and generally upright carriage of the Pekin shows for many generations, and cannot be mistaken by any one who is familiar with them and with the Aylesbury.

In this country, because the Aylesbury were not so plenty, those who had them were less ready to cross them, and it is said to be easier to find pure-bred Aylesbury here than in England, though the breed has not been as popular here as the Pekin.

The popularity of the Pekin has not been due to its size or its beauty. Many would say the Aylesbury exceeds it in both points, but with these qualities it has proved as hardy as our smaller breeds, and a most prolific layer, while the rapid growth and maturity of the young birds, and their quality for table use has made them prime favorites with the poultry keeper, the dealer and the consumer. The old birds retained for breeding purposes are hardy, active, good foragers, and therefore easily kept, and with suitable care begin laying early, so that it is easy to get the young birds hatched out very early, and fit them for market in eight weeks.

If one desires to make money in raising broiler chickens they should start the incubator in December or early in January if fertile eggs can be obtained at that season. This would bring the chickens to a good broiling size in March or April, when the demand is usually the best, and the price as high as at any season. Possibly a few may be sold earlier, even though they weigh but three-quarters of a pound each in February, but the demand is small then, and it may be better to allow them to attain greater weight. And it is prudent to consult the marketman, and see how many he will take and of what size before dressing them, as sometimes an extra price can be obtained for a good lot, and at other times the market may be overstocked.

We speak of incubators, as one cannot well depend upon having a supply of good sitting hens at this season of the year unless the flock is a large one, and so kept as to lay in early winter. The incubator may be some trouble to a green hand, but is not that uncertain and "contrary" thing that a hen is, which sometimes will not set when she wants to if she learns that there is a good nest of eggs ready for her.

With a good brooder it is not difficult to bring up a lot of March chickens if the proper feed is given, and care taken to keep them warm and dry, and to give them good, clean sand to work in. They should not be crowded too many in one brooder, and should be fed frequently until a month old; after that three times a day.

Professor Wiley, chief chemist of the United States Agricultural Department, may be all right chemically speaking when he says that a chicken ought to hang three weeks in a cool place before going on the table, or, as he advises in another place, "hang it out of the window, as the Germans do, head down, and when the head falls off, the fowl is ripe for eating." If this is so we prefer ours before they are quite ripe. We prefer to digest our own food rather than to have it digested by decay before we eat it.

Possibly custom may have led many to cook their fowl and other meat too soon after it was killed, but there is no need of going so far to the other extreme in avoiding this error.

A writer in the Poultry Monthly relates the experience he had last spring in hatching eggs from pullets and from old hens. He first set two hens on 26 eggs, all from pullets. On the 21st day 15 chickens hatched from the 26 eggs. He then put the same male with old hens, and in due time set two hens on 15 eggs each. From the 30 eggs he hatched out 26 chickens on the 20th day, and they were larger and stronger than those from the pullet's eggs.

We do not doubt his statement at all, but it proves nothing. The fact that the setting of the pullets' eggs was done some five or six weeks earlier than the hens' eggs were tried probably had more to do with the fertility of the eggs and the apparent liveliness of the chickens than did the age of the bird that laid the eggs. We think if one half the eggs hatch that we sit in March or early in April that we have a good hatch, and if we waited five or six weeks later before setting eggs from the same fowl, we should expect that nearly every egg would hatch.

If we cared to test the matter we would let the same male run with both pullets and old hens, say a half day with each, and with the same number of each, and then set the eggs all at one time. Even then unless there was a large number of tests made the quietness of the hen that was doing the hatching, her strict attention to business and good health might cause one hen to hatch out more and stronger chickens than another.

We have no prejudice in favor of eggs from pullets, and, indeed, do not care to use the first eggs laid by a pullet for hatching, but we have many times used them from the first litter the pullet laid, and have had very good reason to think they hatched quite as well and gave as large and vigorous chickens as eggs from older fowl. In fact, with Plymouth Rock and Brahma hens, we have sometimes thought the yearling fowl were liable to get so fat that their eggs would not be fertile, or the chickens strong. If our other duties would allow us to watch the hen yard as closely as some do, we might learn more about this matter and many other questions, and be able to give facts and figures in support of our opinions.

How Much Grain!

Throughout the winter every stock breeder and farmer who raises a few cattle and swine decides for himself how much grain he thinks best for the animals. The relatively high cost of grain always makes one err upon the side of giving too little rather than too much. As a rule this condition prevails East and West. There are cases where the granary is filled to overflowing, and the farmer does not attempt to cut his stock down to the lowest amount consistent with their good health.

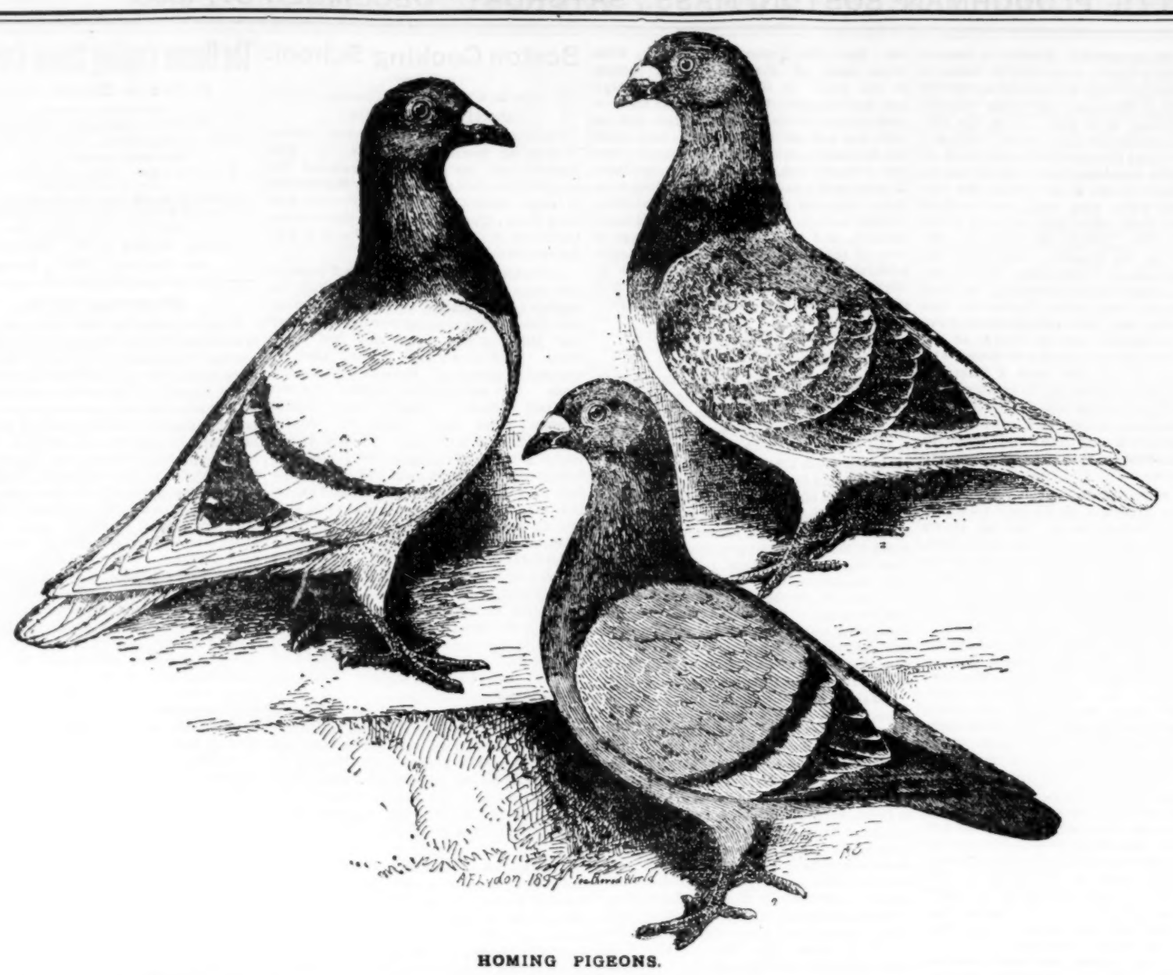
We are better grain feeders today than ever before, and it is probable that American farmers give more grain to their stock than those in any other country. This is because grain of nearly all kinds is cheaper here. We raise it on a larger scale and use it more liberally in fattening our stock. But the temptation is always strong to sell as much of the grain as possible, and trust to other foods to carry the stock through winter. We are gradually getting away from the idea, however, that it pays to feed the cattle on hay and fodder through the winter, and sell the grain.

I suppose every man settles for himself the quantity of grain necessary to keep his cattle in good condition, and, in fact, the amount differs in various parts of the country. Where one can use a good deal of oilmeal and flaxseed-oil cake in feeding, the amount of corn, oats or other whole grains required is very small. There are large oil mills in some counties where oilmeal cakes can be purchased at very low prices. A little of this food mixed with a diet of hay, corn, fodder and ensilage makes a pretty complete ration for cattle without any grains. In fact, cattle can be kept on such a ration in good condition all through the winter. Oilmeal always comes in to give variety to the food, even if it is not depended on for the nutriment furnished.

But, after all, a small quantity of corn, bran, oats or other grains given each day to the cattle and swine will produce results which will compensate for their cost. They add muscle, strength, bone and fat to the animals that makes them stand the rigors of our climate with ease, and when spring comes they are in excellent condition for pasturing. In giving grains, however, it is always better to give it in connection with hay, grass or fodder. The grains fed in this way produce better digestive effects than when fed alone. When oats are given to cattle or horses alone they will eat them so rapidly that quite a percentage will pass through them without being digested. Mixed with cut and moistened hay or fodder, the animals will eat slower, and they will get more good from the grains.

E. P. SMITH.

Ohio.



HOMING PIGEONS.

Orchard and Garden.

Some of our exchanges are publishing a method of irrigating trees, vines, etc., by making a wooden box about six inches square and 18 inches long, and planting it a foot or more into the ground, and filling it with water. It is a good plan, and we have practised it for years where we thought it necessary, excepting that we have used a drain tile instead of the wooden box. Broken tile are often to be obtained very cheaply, and once set with the upper end near the surface of the ground, they are there for years. The water is carried just where it is needed, to the roots of the plants, and in a dry time they draw it up, and it also comes up by capillary attraction, so that it keeps the earth above it well moistened.

Our first trial of it was in a mound for plants in the front yard. So much of the soil being above the level of the path around it, it dried out very quickly, but when that tile was filled once the whole mound would be moist for days, even in the hottest of the weather. And when it did get dry it was no small task to fill the tile, for a bucketful would soak away while another was being drawn to put in it. We used to allow it to get pretty dry purposely sometimes, and then use up a tubful of soapsuds from the laundry in it, and how the plants would grow and bloom after that. It works equally well by the side of a tree or vine or in a rose bed, and those who have not a tile drain may use wooden pipe or tin pipe if they have it, or a joint of stove pipe. If the water gets there, the plant will be satisfied with the pipe.

Nature's method of watering plants is just that, to allow them to get pretty dry occasionally, and then give them a thorough soaking, and only what are known as aquatic plants are kept continually in soak. Many make the mistake of watering every day, and keeping the earth wet and cold, and finally it gets sour, and they wonder why plants and shrubs do not thrive better. This is quite noticeable where people have town water, and can use the hose as they please, and some are too liberal with water when they are irrigating, thinking that if a little is good much must be better when it all comes at the same price.

There were many who were caught by our November blizzard with strawberry plants and other plants not covered, which it is the usual practice to cover well with mulch as soon as the ground has frozen hard enough. But in this section, unless one worked busily the day the storm began, he would have found it frozen but little before it was covered with snow. So long as the snow remains this is covering enough, and as good as any mulch could be, but when the snow thaws away the mulch should be applied. We should prefer to put it on even if the ground were not frozen, than to trust to the alternate freezing and thawing of the winter and early spring. One of the best coverings we ever put on plants was put on when the ground was covered an inch or two deep with snow, and the ground was barely frozen under it. But it was wet and cold, and the mulch prevented it from thawing until spring came. If the earth had been frozen a foot deep when the mulch was put on, it is doubtful if it would have been so free from thawing as it was kept by the inch of snow or rather ice under the mulch.

Seed growers have succeeded excellently well in producing many new varieties of the various garden vegetables that are improvements upon those before grown, but most of them have turned their attention principally toward inducing early growth and maturity. There are certain varieties in which the public need good late-maturing kinds, and one of these vegetables is peas. We have now varieties of peas which will yield good crops ready to pick for market in June and July, in the latitude of Boston, but we do not know of any which will yield a profitable crop for market later than July; and even for the family garden there seems to be none reliable enough to pay for late planting, unless one is willing to do much work for the chance of a few peas.

We used to rely upon the Marrowfat to give us peas in August and September, but they have mildewed of late years to an extent that makes them unfit to offer for market, and do not yield as well as they used to if they are sown late. The Champion of England also seems to give but small yields from late planting, and we know of none that are reliable, or even as good as the Marrowfat once were. We know that we can grow some peas from seed sown as late as the early part of August, and they are a luxury when large enough to cook, but they are so few that they are an expensive luxury. Who will give us a new variety which will supply this "long-felt want"?

A Southern farmer writes to the Farm Magazine that one year he employed a gardener, giving him house rent, firewood, tools, teams and seeds, and half the products of the garden. The result was plenty of vegetables and small fruits for both families, and about $500 to divide from the sale of vegetables, melons and berries. The gardener also had a profit of $115 from his poultry yard. The arrangement was satisfactory to both parties.

But the gardener's efficiency induced him to promote him to farm manager, and to try to work the garden with the farm hands. The result was that the garden played second fiddle to the farm. It would be neglected when there was anything to be done in the cornfield, hay field or any other field. There was a scarcity of garden crops and a surplus of weeds after early crops had been taken off.

He closes by saying, "I, for one, am done with gardening with farm hands. To this my wife adds a fervent 'Amen.'" There is a moral to this which is applicable to many farms in the North as well as the South, or two morals. That there is profit in a good garden well kept, and that not every man can be a good gardener and a good farmer at the same time.

Tobacco Growing in New England.

It is of prime importance that the grower should select the portion of his farm which is the best adapted to the purpose of growing cigar leaf. In my opinion the land selected should be of a fine sandy loam, or such alluvial soils as we find in our meadows, made by the washing by water of fine silt, composed of sand and other materials as we find composing such lands as are found in Hatfield, East Hartford and other Connecticut river towns. Or, again, suitable lands are what are denominated pine plain lands, on the second level—from the river. If the farmer possesses such land, or even that further still from the river, where we come into contact with stone, yet where the soil is still of a sandy loam, yet adapted to the growth of tobacco, I should advise that he devote it continuously to the growing of tobacco.

Tobacco grown on heavy, dark soils, or soil largely permeated with clay, seldom produces a leaf that is desirable. I have always believed that to raise a light, silky leaf of tobacco, the soil should be of a light sandy, porous nature, and kept constantly furnished with such fertilizers as enter into the best cigar leaf. When the field is selected use it right along for tobacco, supplying such elements as the crop demands, and using such fertilizers as experience shows are needful for the production of a serviceable leaf. For this purpose cottonseed meal, potash, lime, ground bone and other nitrogenous manures such a nitrate of soda and wood ashes. All of these are valuable additions to stable manure.

I knew one tobacco grower who applied annually over one ton of cotton-seed meal and a small amount of phosphate to the hill, and for 17 years he continued on the same field. And he claimed that the yield held up, and the quality was improved from year to year. He also said that his crop was generally the first one sold in his town.

It is well known that the crops grown by expert tobacco growers are the first sold and at higher prices than are obtained by other growers. They generally plant the same field year after year. I have in mind a successful grower of this sort, who planted 12 acres with tobacco, plowing in 2½ cords of horse manure to the acre, and then working in the cotton-seed meal and potash on the surface, which land has yielded rather more than 1800 pounds to the acre, and this yielded 60 per cent. of nice, lightcolored, fine wrappers. These acres have been cropped with tobacco 10 or 12 years. He is ever on the alert to make any improvement that others have studied up, or have learned through experimental stations. Tobacco growers who thus improve their crops are reaping handsome rewards.

HILL TOP.

Connecticut Valley, Dec. 7.

Large Wheat Fields.

A wheat field in California over six miles square, or containing more than 25,000 acres, is supposed to be the largest single field of wheat in the world. Some ranches have had a larger acreage in wheat at one time, and one year there was 50,000 acres in wheat on a ranch in Kern County, but it was in many fields, few of which had over 3000 acres. This one is on the bands of the San Joaquin river, is nearly square, and has not a road nor a break of any kind in it; for one man to plow it with a double gang plow, turning furrows two feet wide, he would have to travel 105,000 miles, and at 20 miles a day would take 5250 days, or about 17 years, unless he worked Sundays. The owner, however, has over 200 men, more than 1000 horses and several tons of farm machinery at work, and although they began work about the middle of July, they scarcely expect to get the seed all in by the middle of January; and it will take a larger crowd next year to harvest it.

A Failure in the Sugar Crop.

A report from Louisiana says that the sugar crop is almost a complete failure there. The cane grew large, thick and high, and looked as if it might result in a heavy yield, but the results are so disappointing as to amaze both planters and sugar manufacturers. There has been, thus far, less than 100 pounds of sugar to the ton of cane, and in many cases less than 90 pounds. In other seasons the average has been up to 18 pounds to the ton of cane, and it cost to obtain this small amount than it usually does to get the larger amount. One manufacturer says, "We are using 25 per cent. more fuel to get 50 per cent. less sugar." The loss will not generally fall as heavily on the planters as upon the corporations and capitalists who own the sugar factories, as in most cases the cane has been contracted for at a fixed price per ton of cane, and most of them are rich enough to bear the loss. Nor will it greatly affect the price of sugar, as the production of Louisiana is but a very small part of the consumption in this country. There was a similar trouble of no sugar in the cane in 1877, and the cause of it was then and has remained an unexplained mystery, and so is the trouble this year in spite of scientific investigators.

This country has for the past two months been exporting Alabama iron to England at the rate of 2000 tons per month. It will probably continue to do so through the winter. This does not mean, however, that we can ordinarily put down American iron in England cheaper than it can be procured from European mines. England was long ago obliged to rely on the iron mines of Spain, Russia and Sweden for the raw material for her manufacture of iron. We are exporting iron now for ballast in the great number of vessels carrying cotton to British manufacturers. It can probably be sold at a small advance on its cost here, and therefore pays better than to use stone which is often used for ballast, and is good for nothing either side of the Atlantic. The fact that American iron manufacturers can furnish England with iron in bars shows that we have not much to fear from British competition in products made of iron in the markets of the world.

—Experiments have been going on with an ingenious machine which shuts over a man's eye so that the eyelid as it winks opens and closes a chronograph. So far the quickest wink on record is about a sixth of a second.

True Charity.

BY LILLIAN WHITING.

"Looking around me I affirm that the spiritual view which Mr. Carlyle takes of human life is the only good, the only essentially religious one,—and one of extreme importance, here especially, where the very men who battle the most boldly for social progress are led away by degrees to neglect the development of what is highest, holiest and most imperishable in man, and to devote themselves to the pursuit of what they call the useful. There is nothing useful but the good, and that which it produces; and fulness is a consequence to be foreseen, not a principle to be invoked. The theory which gives to life as its basis a right to well being, which places the object of life in the search after happiness, can only lead vulgar minds to egotism, noble and powerful minds to deception, to doubt and to despair. We must come to the conviction in this as in all other cases that there exist no rights but those which result from fulfilment of duty; that our concernment here below is not to be happy, but to become better; that there is no other object in human life than to discover by collective effort and to execute, every one for himself, the law of God, without regarding individual results."—Mazzini.

The theme which asserts itself the most insistently in every life in this holiday season is that of the relative values of duty, of generous helpfulness and the fulfilment of spiritual obligations. To just what degree it is the highest right to "sell all thou hast and give it to the poor" must always be a problem to the thoughtful follower of Him who uttered these words and who had not, himself, where to lay His head. Not merely (and possibly) to the multi-millionaire, to the possessor of every conceivable luxury, do these questions recur, but to those who while living only in a modest degree of comfort, yet realize that this degree exceeds that of the actual necessities of life, and seeing their neighbor lack even these are haunted by the perplexing thought that one has hardly the right to comfort when another lacks the bare necessities of living. This is the Tolstoi theory,—the theory that all grace and beauty, as well as luxury, should be resigned, and that each person should labor with his hands for utilitarian results. And the test of this must be by the relative values of existence and production. If physical existence for the longest term and the largest number is the ultimate ideal of human life, Tolstoi's theory would be right; if the life of thought, of art, of creative power of any kind has any claim, he is then wrong, for productive effort requires certain conditions for its best results, and if these results are of any importance as a contribution to life, then has one a right to the conditions that render them possible.

The problem is sometimes stated as a personal one. A minister of the gospel, for instance, is living in the fashionable quarter of a city; his home is one of exquisite comfort, if not of luxury. A well-filled library, beautiful pictures, dainty touches of all kinds make the rooms full of charm and suggestion, and then the question arises, should all these surroundings of refinement, beauty and comfort be renounced, and their proceeds given for food and fire for the poor? Should the minister himself take upon his life the condition of the poorest? There have been wise and holy men who so believed. One of the most important orders of the Roman Catholic Church include poverty as one of the conditions of the vows they take. The Anglican Church has a similar order. But may there not be an undue stress, a false emphasis, laid on renunciation as well as on luxury? Are not either of these incidental, so to speak, and rather a matter of individual circumstances and conditions, than a state to be determined by any general or abstract law? The end of life is neither poverty nor riches, but achievement. We are in this world to do something, to contribute toward the progress of the race. To do this is to enter into co-operation with the divine powers, and to realize the divinity within ourselves. To accomplish this requires certain conditions that vary with individual powers and states. The conditions of living are one's tools, so to speak. To dwell in luxurious comfort for the mere gratification of the senses, is indeed ignoble and unworthy; to use these conditions as the reinforcement and the sustaining support of immortal energies is in no wise ignoble, but is rather a part of the responsibility of one's individual life. And the truth is that while poverty and inability are to be wisely helped and sympathetically considered, yet still one has his duties to himself and his higher achievements. Instead of depriving himself of a home and pleasant surroundings, is it not something to make a home and hold it as a centre of hospitable and beneficent life? As a place from which radiates love and helpfulness, and all sweetness, and good cheer? To use comfort merely as a cushion on which one goes to sleep is the misuse of it; to use it as the ladder on which one climbs to performance is its use. But the results of this personal achievement are to be such as are shared by society; not held as an exclusive personal benefit.

In this lies the test of any human life. Whether one produce these results in the conditions of poverty and renunciation, or in comfort or luxury, is incidental compared to the use made of these results. Self interest is not the law of human activity. The highest sacrifice may come, often does come, out of external conditions which the world calls prosperous and luxurious ones. Poetry, painting, music,—these redeemers and inspirers of the world—demand a certain immunity on the part of the artist from the exterior turmoil of life. And yet, inasmuch as they are the products of spiritual creation, no work that is fitted to carry an immortal message ever grew out of a selfish life. Conditions are merely means to an end, and the end is that of helpfulness; the ideal is that of the truest and most valuable help to the largest number of people. "A man of business has no more right to make personal profit the supreme purpose of his store, his shop, his capital, his factory, his railway, than Jesus had to work miracles for personal profit," well says that moral radical, that spiritual hero, George D. Herron. Is not his, indeed, the true gospel? The end of all private achievement is public enlightenment. The supreme aim of all personal endeavor is social aid. No one liveth to himself. "There is no such thing as a secular affair in the universe of God," says Dr. Herron. The making and keeping of a beautiful home is not a secular nor a selfish affair; it is the establishment of a spiritual centre, into which the sad, the discouraged, the unfortunate may come and may receive the divine communion of love, helpfulness, sweet and sympathetic thought and abounding good will. A home may thus consecrate to helpfulness and uplifting every gem of art, every gleam of beauty, every charm of luxury within its walls, and add to the spiritual riches of the universe by its existence rather than by its renunciation. Man does not live by bread alone,—nor by food and fuel doled out to him, although soup and coals have their uses. But he lives by sympathy and recognition, and by entering into beauty and sweetness and charm, into all that uplifts happiness to holiness.—Boston Budget.

....Many a Christian destroys his peace and usefulness because he is not willing to do little things. He wants to speak and pray well, eloquently, edifyingly, or not at all. Because he cannot do some great things he will not do anything. He must sit in the highest seat or nowhere. Now, no one is fit to do great things unless he is willing to do little things. He must be faithful in the least, or he will never be faithful in the greatest. If all were willing to add a little to the interest of a meeting, a Sabbath school or to the strength and influence of the church, there would not be so many praying to be excused. Happy is the man who is willing to do a little, the servant of all, a door keeper, bell ringer, fire builder, lamp lighter,—anything that will serve Christ in the house of God.—Exchange.

MASSACHUSETTS PLOUGHMAN
NEW ENGLAND JOURNAL OF AGRICULTURE.

BOSTON, DECEMBER 31, 1898.

☞ *Persons desiring a change in the address of their paper must state where the paper has been sent as well as the new direction.*

There are a great many scabby potatoes this year, the result of climatic conditions while the tubers were growing, which were unusually favorable to fungus growth. As a result, many of these scabby potatoes will be used as seed, and as the fungus planted with the potato is pretty sure to live, it means more scabby potatoes next year. Dipping the scabby seed after cutting in a very weak solution of corrosive sublimate will kill the fungus, and probably will make a smooth crop, even where scabby seed is used. Two ounces of corrosive sublimate to 15 gallons of water is as strong as should be used. Corrosive sublimate is a very virulent poison, and no stock should be allowed to get at cut seed thus treated.

The fact that Russia, which, next to France or Spain, is the worst debt-ridden nation in Europe, is applying to American bankers for a loan is significant of the growing importance of this country as a centre of capital. Probably not until our enormous exports of the present year would such an appeal to us be dreamed of. The rate for money here is now said to be lower than it is in European capitals. If this be so money is too cheap here. But the remedy will be found not in loans to hard-up European governments, but in commercial expansion in Asia, which is now almost certain to fall to us to accomplish. But there is hardly need to give New York capitalists a hint as to the best use for their money. Most of it has been made in enterprises under their own management, and in this country we have a wider field for investment at home than has any European power.

In a conference by the police authorities of all European nations, it has been agreed that laws against anarchists shall be everywhere enforced with greater severity than ever before, and that no nation shall give harbor to men who have conspired against the government of another. It is very doubtful whether England will agree to this last proviso. It has harbored Kossuth, Mazzini and Garabaldi at times when neither of these patriotic men dared return to his native land. The sense of justice is not acute enough in despotic governments to warrant any free government in turning over refugees to their cruel mercies. All of this excitement is of course due to the brutal murder of the Empress of Austria by an anarchist. But the perpetrator of that murder is under Swiss law suffering a punishment that is worse than death to him, because if executed he knows that his associates would regard him as a martyr, and some other anarchist would become crazy enough to avenge his companion's death.

One of the earliest advocates of secession, if not the earliest on record, was the Hon. Josiah Quincy of Massachusetts, and singularly as it seems now, the reason for it was his opposition to expansion. After Jefferson in 1803 purchased Louisiana from Bonaparte, when the bill was offered to provide for its admission as a State, he said, "I am compelled to declare it as my deliberate opinion that if this bill passes, the bonds of this Union are virtually dissolved; that the States which compose it are free from their moral obligations, and that, as it will be the right of all, so it will be the duty of some, to prepare, definitely, for a separation; amicably if they can; violently if they must." The Hon. John Quincy Adams offered a resolution in the United States Senate denying the authority of the United States to tax the people of Louisiana, which only received four votes in its favor. Thus Senator Hoar is but "following in the footsteps of his illustrious predecessors" in opposing territorial expansion, though we think he will not go as far as did the Hon. Josiah Quincy.

The granting of special privileges to distinguished Americans returning from Europe, as to exemption of their trunks and baggage, has been so greatly abused that the Treasury Department has been obliged to prevent it for the future. It seems very strange that authority could be found for ever granting such privileges to any body. Foreign ambassadors and ministers are exempted from having their baggage searched by a plain law, but towards all others the tariff law applies equally, and it is unwarrantable perversion of law that any discrimination should be made. Neither can people any more secure passes to go out with revenue vessels to meet incoming vessels. These changes are needed to prevent smuggling, which has been done to a serious extent under the practice now forbidden. There are so many people who believe it no sin to defraud the Government that it is not safe to give anybody the opportunity. Only those who are known to be really sick can be exempt from search. While the mass of people pay war taxes cheerfully, it is infamous that some favored people have been able to save money by defrauding the Government.

The English Liberals appear to be hopelessly divided and have little present hope of coming soon into power. Sir William Harcourt has resigned their leadership, as his policy was less likely to unite them than that of Mr. Asquith, Mr. Morley, or even Lord Rosebery. If Lord Salisbury had not redeemed his hesitating policy by his firm stand for British supremacy in the Nile valley, it is likely that the Conservatives would have been overthrown at the next election. As it is, the Liberals can agree on nothing, except to find fault with the administration. Anticipating Lord Rosebery as the next Liberal leader, Lord Salisbury rather maliciously suggests that he make the abolition of the House of Lords the Liberal issue. Of course this would be impossible for Lord Rosebery, as he is one of the class to be proscribed. Yet the more radical Liberals warmly favor abolishing the Lords, and would give Lord Rosebery rather faint-hearted support. It is the trouble in England as it is in this country that a party long out of power comes to be merely an opposition party, having no policy but to fight whatever the administration favors. It is an unworthy position for any party to assume. If the radical Liberals should have their way and commit the Liberal party to the abolition of hereditary legislators, it would alienate thousands of its own supporters, for the average Englishman, as Thackeray long ago said, "dearly loves a lord." It was wise in Mr. Gladstone to decline the dubious honor of elevation to the peerage that was more than once offered him. The great William Pitt was far greater under his untitled name than as the Earl of Chatham.

The fact that Admiral Dewey and General Merritt both agree that it is best for this country to hold the Philippines, and that we shall have no difficulty with the natives, more than offsets the pessimistic fears of those in this country who are afraid of the shadow of what seems clearly to be our destiny. A large proportion of the best people on the island of Luzon distrust Aguinaldo. Even some of the Malays who have supported him are now in favor of United States rule. It will have to be that any way, whatever policy we may ultimately adopt with regard to these islands, for at first we shall be compelled to keep enough military force in Luzon to save the people from the civil war which would follow if we left them to their own devices. Before military rule ends Luzon will probably be ready for a territorial government, and there will be a strife among its ambitious men as to who shall represent it as a delegate in our national Congress. All the wealthy residents in Manila, of whatever nationality, prefer annexation to trusting to such government as the military dictator Aguinaldo would give them.

The American Federation of Labor is a much more conservative body under the presidency of Mr. Samuel Gompers than it was when it was first organized. Mr. Gompers himself now sees that there is more than one side to labor troubles, and that all who devise what they assume will be remedies cannot be followed with safety. At the Federation convention in Kansas City last week one of the delegates introduced a resolution endorsing socialism as the only remedy for labor wrongs. At some small workingmen's meetings such a resolution might go through with a rush if a glib speaker endorsed it. But the Federation of Labor is a large, delegated body, most of whose members feel their responsibility. Instead of adopting the resolution, the convention rejected it by the decisive vote of 1807 to 420, or considerably more than four to one. It is another proof that the mass of the people can always be trusted, especially here where there are free schools for all. There has been much unrest among workingmen resulting from the hard times which have lessened the prosperity of all the past few years. But Americans less than any other people in the world are inclined to despair. This is and always has been the land of hope. Socialism is a device of the desperate, and those who advocate it mostly come from Continental Europe, where conditions are often so bad that desperate measures often seem almost justifiable.

Our Re-United Country.

The enthusiastic reception given by the Southern people to President McKinley, at the Atlanta peace celebration last week shows clearly that the long-looked-for era of good feeling between all sections has returned. It looks now as if in this respect Mr. McKinley's administration will parallel that of James Monroe 80 years ago, when the violent partisan prejudices of the first 30 years of our Government had died away. There is, indeed, a closer personal parallel between these two Presidents than is often thought. Monroe enlisted as a private in our Revolutionary War, and it was as a private that William McKinley went into the service of the Union cause when the Government, founded 75 years before, was imperiled.

Both President Monroe and President McKinley received votes from those who had been opposed to them in politics. The reason was that both were moderate men rather than fiercely partisan, and were willing to learn as Providence unfolds events. There has been much to learn in the events of the past year. No human wisdom could a year ago have foreseen the problems that are now confronting the American people as to the disposal of territory that the results of war have placed in our control. The only wise policy has been that which President McKinley has pursued, that of reverently waiting on Providence, while doing all the time what seems best, then being ready to change this policy as events may show to be necessary. It was thus that General Washington conducted our Revolutionary War, and thus that Abraham Lincoln guided our ship of state during the dark and stormy period of our civil conflict. These were the best of teachers, and both President Monroe and President McKinley proved apt pupils. A recent utterance of Colonel Bryan, who was President McKinley's competitor, shows him to much poorer advantage. He was opposed to all national expansion last spring, objecting even to our annexation of Hawaii. Now he is willing to concede that Hawaii and Porto Rico must be ours, but very inconsistently objects to keeping any more than a coaling station in the Philippines after we have acquired them. Cannot Mr. Bryan see in the progress he has thus far been almost forced to make, that our national development at the present time is in higher than human hands, and beyond the ability of any human wisdom to forecast? Yet, though opposed to further national expansion, Mr. Bryan urges the ratification of the treaty by which all that Spain has held in the Philippine archipelago will be transferred to the United States.

To suppose that under our control justice and freedom will not prevail in the Philippines is a pessimistic insult to the whole American people. Since slavery was abolished this country has given to all excepting its women all the rights of self-government that they were capable of using. Except in the island of Luzon the Philippine natives would not know what to do with a ballot if they had one. For the present, and for some of the islands probably for many years we must either govern by force, or simply let these islands alone to manage themselves under tribal governments, just as the native Indians have always done. In the end we shall develop civilization among all the Philippines, as we have begun to do among the Indians. But to try to organize self government for savages is a height of folly that no practical statesman would favor. If we had woman suffrage on the same basis with male suffrage in Massachusetts this country would be much more consistent than many now are in protesting against ruling the Malays, giving them freedom and justice even without their consent.

But it is the subsidence of the old political questions which distracted the country before their administrations that the closest parallel between President Monroe and President McKinley will be found. There were no partisan issues by the time Mr. Monroe had completed his first term. He was re-elected almost unanimously. It would have been unanimous, except that one elector from Vermont believed that no President after Gen. Washington should receive the honor of unanimous election to the presidency, so that one vote was cast for another name. After Monroe a new division of parties was made, as there seems almost certain to be after Mr. McKinley leaves the White House. Who hears or cares much about the silver issue now, except as to securing an international agreement for bimetalism which the world still needs? It is really one of the most remarkable facts in our present and probable future expansion of trade in the far East, that this will make a market for silver, which European capitalists will not have anything to do with. It is the fact that this country has more silver than any other, and that the hundreds of millions of China, India and Japan prefer silver money, that will give to the United States the control of the trade with Asia, and will, at the same time, raise the price of silver all over the world, by opening the markets for its surplus. The time for agitating in favor of free silver 16 to 1 has gone by. Probably if this country had tried it alone at any time before Providence had prepared the way, such attempt would have resulted in failure. But the events of the past few months have shown to those who discern the signs of the times a future in which this country will by its eastern trade be made so prosperous that the era of hard times through which this country has passed will seem only like a bad dream in the night, after the sunlight of morning has awakened us.

The hearty reception given all over the country to President McKinley's plea that hereafter Confederate as well as Union valor in our civil war shall be recognized, marks the burial both sides the line of the bloody shirt, which has far too long been used to embitter partisan animosities. It was too soon after the war when Horace Greeley raised the cry, "Let brethren North as well as South shake hands across the bloody chasm." President Grant appealed to this sentiment in his campaign motto, "Let us have peace." Alas, peace did not and could not come then, nor yet four years later, when thousands of Northern Republicans broke their party relations and allied themselves with the Democratic party to secure self government for the South. Many of these have seen with surprise that it was through the Republican Presidents, Hayes, Garfield and Arthur, that the principle of home rule was so firmly established that no party will ever hereafter dare to supersede it. The fear that our military occupation of newly acquired territory will do this is almost too absurd, after all this country has gone through, to be worthy of notice.

Though our country has been reunited over the graves of the Confederate dead, which will hereafter be the common care of all, there are injustices still existing, as there were 80 years ago in Monroe's administration, that indicate trouble for the future. It was while all parties were quiescent that the first conflict between slavery and freedom was settled by the Missouri Compromise, giving Missouri to slavery and insuring all other territory north of 36.30 to freedom. The menaces to our future now are probably less in spasmodic outrages on negroes in South Carolina, though these are serious enough. The worst danger our reunited country has to fear at present is the dominance of trusts. It may be, however, that national expansion and the prosperity it will bring will lessen and perhaps wholly eliminate this danger also by giving to all the people a wider chance for earning a livelihood. It has been during era of declining prices that the trusts have almost seemed to be a necessity for the protection of capital. It has for many years been increasingly difficult to do business on a small scale, and this has made hardest times of all for those entirely dependent on their labor for their living, for it has made it possible to force them to accept unnaturally low wages. If this system is not checked it will in time reduce the American workingman to the position of the European peasant, content to vegetate rather than to really live. When we have a constantly expanding market, giving work to all, it will become, as it used to be, impossible to long depress wages.

"Peace on Earth, Good Will Towards Men."

Christmas is the best time in all the year to take an account of stock in brotherly love. The Child that was born at Bethlehem came that we might have in our hearts those fruits of the spirit which St. Paul has enumerated, and the advancement of the world towards the righteousness for which we should all strive can only be correctly estimated by a comparison of this year's gain over last year's balance on the side of peace on earth and good will towards men. Every earnest American Christian is confronted today, therefore, by this practical question: "Are we, as a people, nearer the realization of the angel's prophetic song than we were a year ago?"

The answer can but be the glad word "Yes!" We have made strides during this year of our Lord eighteen hundred and ninety-eight, for which many a heartfelt "Gloria in Excelsis" should find its way up to the throne of Him who watches and waits patiently and lovingly for the coming of His kingdom. Though Europe is still in arms, and we have ourselves drawn the sword during the year, there is more peace and more good will today than at any Christmastide since the dawn of history. The prophecy of the angelic host is visibly being fulfilled, and we are perceptibly nearer that fulfilment than we were last year. We have conducted a humane war for a humane cause, and we are humbly preparing to take a great burden upon ourselves in the further cause of humanity. It is true that there are still sharp struggles for territory and unlovely contentions for commercial advantages, but in that we have done one unselfish deed in an unselfish way, we have shown the height to which we can rise. Such a nation will not be unworthy of any trust circumstances may force upon it.

Peace on earth! Has not the Czar of all the Russias outlined a splendid peace policy? William T. Stead has written of this subject: "I have heard from the Czar's own lips that it is the earnest desire of his heart to do something practical, and that quickly, to divert to the service of humanity some of the many millions now devoted to preparations for war. . . . It is necessary, however, to act and act at once. The citizens of the United States should by public demonstrations, formal resolutions, and by every other method whereby a democratic people gives expression to its convictions and its aspirations, manifest to the world their determination to help the Czar put this thing through." The Russian proposals, this correspondent proceeds to point out, include a truce of God for five years, limitation of armament expenditure, and international arbitration in cases of dispute. If these proposals are accepted the grandest demonstration ever made of the peace-loving passion of the civilized race will be within our reach.

Good will towards men! Surely our sense of brotherhood has been palpably proved since last Christmas. Leaving out of the question the high purpose with which our volunteers went into this last war, there was the fine interchange of the amenities of life between those who were enemies. Both the Spanish kindness to Hobson and our considerate treatment of Cervera compare most favorably with the fashion in which during the civil war brother Americans abused each other. Moreover, do we not feel the keenest sympathy with every case of distress which comes to our ears? Is there famine in Italy? Let us help feed the hungry. Is there a poor woman starving at our doors? Let us visit her and minister to her. Last night the Salvation Army had a Christmas tree and gifts for one thousand poor children. Tomorrow the army gives a free dinner to three thousand men, women and children. All this is an increase over last year's benefactions, and shows a glorious balance in view of the years when there were no such celebrations. Truly, they who believe in Christ may sing today with rejoicing and good cheer the glad music of the angels' song.

Re-Enlistments.

We learn that Col. Pew of the Eighth Massachusetts Regiment has received permission to fill up the vacancies made by sickness or death in its ranks by mustering in any of the men who may apply from the ranks of the Sixth Regiment, not yet mustered out, and that he has asked to have also the privilege of accepting the mustered-out men of the Second and Ninth, but we do not notice any great eagerness to enter again into the service upon the part of the men who have returned. We remember that the militia who went out under the first call of President Lincoln in April, 1861, were not long at home before they had re-enlisted, but few of them had seen much hard fighting, and their three months service was but little more than a tour of camp duty and a picnic for that time.

But the men who went out later for two, years from New York State, and those who went for three years from Massachusetts, who had seen comrades fall by their sides on many a hard-contested battle field, and who had endured as many hardships and suffered as many privations as did our men in Cuba or Porto Rico, showed the same readiness to enter the service again after they had been a few weeks at home. Even those who were discharged before the expiration of their terms, by reason of disability, caused by wounds or disease, offered themselves again almost as soon as they were able to march, and sometimes before, while in 1863 thousands who were in the ranks with but a few months to wait for a return home, volunteered to remain for another three years if the war should continue so long.

But the lack of readiness to re-enlist now is not because the men are less patriotic than they were in 1863 or 1864. Before the war with Spain seemed imminent, we heard some sneers at our militia, and intimations that if they were called to the front many of them would seek for excuses to remain at home. But, to their credit be it said, we heard of but few who showed any unwillingness to go, and tears were seen in the eyes of many a young man when the examining surgeon pronounced him physically unable to endure the hardships of a campaign. And when such a decision left a vacancy in the ranks, there were others ready to apply at once for the chance to fill it.

If our peace negotiations had been broken off and active war begun again, we think the soldiers who had been through one campaign would have been willing to go again, and there would have been no lack of others to go with them, while with the war over they do not care to go out to camp life and garrison duties, even in the warm climate of Cuba, with probably better care and less danger from disease than they had before.

But our American people, if patriotic and willing to do or die in defence of our country's flag and our national honor, are not a military people. The "pomp and pageantry of war" have but little charms for them. The brass buttons and equipments of a uniform do not attract them.

After the surrender at Appomatox in 1865, not many of the veterans cared to enter the regular army and adopt the soldier's profession, even among those who might have entered it with honor, and with the rank gained by service in the volunteers. They preferred to return to their farms, shops, factories, stores and counting rooms, and to show their patriotism by becoming peaceable and useful citizens in private life.

Even now, though they put on their uniforms once a year and go out to march beneath the folds of the old flag to the sound of martial music, yet when they have placed their tributes of love and respect upon the last resting places of those who will march with them never again on earth, they hasten home to lay aside their insignia of military service, and to perform their duties as citizens. And thus we hope it may always be.

Christmas Thoughts.

"On earth peace, good will toward men," sang the heavenly choir around the manger where lay the infant Jesus, and on Christmas Day this year many an earthly choir will sing the same refrain, and there are many who will realize as they have never done before how beautiful it is that that there should be "on earth peace," where but a few months ago there was war and bloodshed.

Those who are rejoicing now over the safe return of sons and brothers, husbands, sweethearts and friends who were among the perils of the camp and the battlefield, feel strongly the beauty of a return of peace to the country which had so long been at peace with the world. Those whose loved ones have not yet returned can rejoice that the dangers from shot and shell are no longer added to those of disease, and that the time must soon come when they, too, may welcome home the soldiers so dear to them.

But there are others who must mourn for those who will return no more in life; who have made the great sacrifice for their country and for humanity; and some have returned crippled by wounds or enfeebled by disease. To all such our sympathy must go out in the midst of our Christmas festivities, and though we know that neither fame nor any honor that we can show to the dead or the living can bind up their wounds or lessen their sorrows, yet we shall feel that in bestowing that, we are but paying a part of the debt the nation owes to them.

Long may the blessing of "peace on earth, good will toward men" reign over our country, until all the earth can join in the anthem, not on Christmas Day alone, but on every day, and throughout all time. If that peace is most enduring which is founded upon the result of a righteous war in behalf of humanity downtrodden by tyranny, oppression and wrong, nobly have we earned it for ourselves and for those in whose behalf we have entered into battle.

FEEDING GRAIN TO SHEEP.

There is nothing better than the V-shaped trough in which to feed grain to sheep. It is easily made, and should be set up high enough so that sheep will not put their feet into it. Nailing a narrow board a foot and a half above the trough will keep the sheep from stepping or jumping over it. Sheep will clean out all the grain in the bottom of the V, and if they do not it should be turned over after they have eaten, and left turned until ready to feed again, so that it will not fill with snow, which musses and dirties the feed.

Watering Horses.

It is not pretended that chemical purity is necessary in the drinking water of horses, but the importance of its being reasonably pure, and above all free from dangerous organic matter or poisonous minerals, like lead, is so universally acknowledged that we may be excused discussing it here. Excessive hardness is also to be avoided, for, as every experienced stableman knows, hard water disturbs the digestion, injuriously affects the appearance of the coat, and is probably, at least, an accessory cause in the production of gravel or cystic calculus, about which complaints are so common in aged horses.

The coincidence of the prevalence of stone in the bladder, where the water of the district is hard, is at least worthy of note, although it is perhaps rarely the active cause. Horses exhibit a decided preference, in common with other animals, for soft water, and prefer a drink from a dirty pond, where the fluid has become softened by exposure to sun and air, to the brighter and sparkling water coming from springs having their origin in geological formations, causing it to be highly charged with lime and magnesian salts.

The softest water obtainable should always be reserved for horses, and none is generally better for them than sweet rain water. This may be caught and stored for their use where the spring water is hard, but care should be taken to keep the tanks covered, so as to prevent the intrusion of animal or vegetable matter, which may cause putrefaction and the development of poisonous elements.

The quantity of water allowed to horses is often insufficient. The water required by animals for nutritive and depurative purposes is obtained partly from the food, but principally from the drinking water. Green foods and roots contain a good deal of water,—as much maybe as 90 per cent.,—and animals getting these foods require to drink less, but the staple foods of the horse, oats and hay, contain no more than from 14 to 16 per cent. of moisture, and on this dry food there should, unless under special and very peculiar circumstances, be a free allowance.

More horses have suffered from indigestion and colic on account of an insufficient supply of water than ever did so from getting too much. That eminent authority on the feeding and management of working horses, Mr. Malcolm, who has charge of the Birmingham Corporation horses, says: "A sufficient supply of pure water is essential for the maintenance of health, and if frequently and regularly given, the horse himself will usually be the best judge of the quantity he requires." Mr. Malcolm advocates a constant supply, and testifies, after many years' trial, to the entire banishment from his stud of such complaints as colic, indigestion or incapacity as the result of it. If water be deficient, there is not only an imperfect elimination of effete matter from the system, but the digestion of the food is interfered with, and impaction of the bowels not infrequent. Mr. Malcolm relates a well-marked case of the latter.

There are a great many owners and stablemen who think that a horse ought to be watered after feeding. The reverse is the case, at least when grain is fed. This idea and a prejudice against allowing an unlimited quantity are the chief things that operate against a constant supply.

There is certainly a difficulty about this when stalls are used, and the water trough has to be placed alongside the feed manger. Food gets into the water and water into the food. Where, however, loose boxes are used the water trough can be placed in one corner and the manger in another, and the difficulty disappears. The trough can also be kept clean where there is a feed pipe and waste pipe, but these costly fittings are not found in ordinary farm stables.

Where the water is brought to the horse in a bucket the vessel should be a large one, so that the horse is certain to get enough, and if there is any doubt it should be refilled. Horses that are allowed a free supply or that are watered at frequent intervals drink relatively less than those receiving water at long intervals or that get an irregular supply. When the chance is afforded they make up for the deprivation, often with disastrous results that tend to get water a bad name with unthinking men as a cause of disease.

Unless quite used to a free supply, the quantity of water should be limited or withheld for a time when horses are excessively heated, also when first stabled after doing a hard day's work in particularly cold weather. It must, however, be understood that there is a vast difference as regards danger between a drink of water that has been exposed for some time and raised to the temperature of the atmosphere, and one of water freely drawn from underground pipes or a deep well.

With regard to the time of watering, the necessity of giving it before the grain, except in the instances mentioned, should be obvious when the small size of the horse's stomach is borne in mind, and the process of digestion considered. Water given on a comparatively empty stomach does not long remain in that organ, but is almost immediately conveyed to the large intestines. If it is withheld until after feeding it is almost physically impossible for both food and water to be retained in the stomach together, and a portion, at least, of the food is carried by the water into the intestines undigested, where, besides being a loss of nutriment to the animal, it is a source of irritation.

Of all the common faults, and they are many, in the alimentation of horses, that of giving water just after a full feed of grain is among the worst. This, unlike hay, has to undergo gastric digestion in the stomach, where its nitrogenous elements have to be dealt with, not in the intestines, and if grain is washed with water from the stomach before its albuminoids are dissolved out and digested, they are lost.

An excess of cold water after food causes vascular congestion and violent muscular contractions, lowers the temperature, and, by interfering with digestion, tends to disorders of a dangerous character, and, as we have seen, even a big drink of water of moderate temperature is full of peril to the soliped.

Always allay thirst before the grain is given, and if any water is allowed after it should be merely a mouthful until the lapse of an hour or two has given time for gastric digestion.

Horses at work in the fields where nose bags are carried for midday baft commonly get no water from morning till night, because it is often troublesome to obtain. This is a grave mistake, and one that not uncommonly proves costly to the owner in the shape of loss,—if only in time and money for medicines or veterinary attendance.—M. R. C., V. S., in Mark Lane Express.

A New Departure in Fertilizers.

We have seen for the first time a complete catalogue of fertilizers and fertilizer ingredients. It is issued by the Bowker Fertilizer Company, Boston and New York. This company, always enterprising and sagacious, has made a new and wide departure this year in publishing a catalogue in which the many different fertilizers and fertilizer materials are described and classified. In stating the analysis of each, only the minimum guarantee is given, and all confusing or magnifying statements are omitted. Simplicity and brevity are the order of the day, and this new arrangement, with its simple statement of analysis, together with the common-sense classification, will be appreciated by every farmer, and especially by the State inspectors, who for some time have urged the simpler method.

The Bowker catalogue is so arranged that one can most easily make a selection of the kinds best suited to his needs. For example, all the kinds which are intended to potatoes and root crops are brought together; all those intended for grain and grass are placed in another group, while prepared phosphates and natural manures, such as wood ashes, raw bone, sheep manure, etc., and agricultural chemicals are listed and described by themselves. As one of our friends expresses it, "It is a New England primer of fertilizers, so clear and simple." A postal card asking the Bowker Company for one of these catalogues will be a cent well invested.

BUSINESS TACT IN FARMING.

While it does not pay farmers to suddenly change their crops whenever prices go too low for profit, there are often ways of overcoming these low prices, and perhaps manufacturing the crop into something that will give a good return for all the labor expended upon it. Two years ago, when there was everywhere a superabundant apple crop, the farmers who had evaporators hired enough help to put up their apple crop in the very best form for a period of scarcity. This is really doing on a much larger scale what every old-time housewife has always been used to doing, that is, to dry enough apples so that she can have sauce and pies for the time not many months hence when apple pies will be in demand, because most of the apples have rotted. There was a light apple crop through most of the country both last year and this, and the result is that the evaporated apples of 1898 either have been or will be disposed of at a profit. There are often times when grain damaged by harvesting, or which for other reasons sells below what it costs, that can be marketed by feeding it to stock. It is in such ways as this that business men learn to change losses into gains, or at least to mitigate their losses. The farmer who has what he calls "bad luck" should imitate this example.

TELEPHONES TO FARMS.

The telephone has become one of the almost indispensable necessaries in city life. If we take the original derivation of our word "civilized," which means to belong to a city, from the old Latin word civis, we may well inquire when farmers are to become "civilized." One step towards this is to put up telephones between farm and farm through the strictly rural districts. The market gardeners in the suburbs of cities near Boston have in many places extended the telephone service to their residences. It has proven a great convenience, enabling them to receive and fill orders from their customers. We think this method of bringing the city to the country is bound to extend so that it will include farmers as well as gardeners. Out West farmers are much farther apart than they are in this State, and telephonic connection between all the farmers in a neighborhood is perhaps more common than here. The Indiana farmer has a number of letters from farmers in that State showing the great success and small cost of farm telephone service. One fact the farmers have learned is that it does not pay to put in a cheap transmitter. It is unreliable and soon becomes useless. By furnishing the telephone poles from their own farms and doing the work themselves the telephone service costs very little. Two or three years ago telephone service was attempted over the wire fences of the far West. But the wire got out of order and the service was so irregular that only telephone wires on poles are now advocated by anybody in country districts.

Daniel Roberts of Moorestown, N. J., who recently purchased from Hood Farm, Lowell, Mass., the valuable Jersey bull by Chromo and out of Nasher, which was advertised in these columns, writes as follows on receiving the animal:

MOORESTOWN, N. J., Dec. 14, 1898.

Hood Farm, Lowell, Mass.:

Gentlemen—The bull arrived this morning about nine o'clock, safe and sound, and all right. He came through in great shape, and I can assure you I am much pleased with him. It seems like risky business to buy such an important part of a Jersey herd as a bull without seeing him, but I could not well go on just now, and I am well satisfied. I very much want to come on some time and see your valuable herd. Thanking you for your most excellent treatment and awaiting the transfer, I remain,

Very truly yours,
DANIEL ROBERTS.

....A merry Christmas to our heroes brave,
Who risked their lives Humanity to save;
A merry one to our McKinley, oo,
To Uncle Sam and Yankee-doodle-doo!

Almost every stock farm in America is burdened with a few blemished horses, but the number of such horses would be largely decreased if more horsemen were familiar with the merits of Gombault's Caustic Balsam, the great French veterinary remedy. This remedy supersedes all cautery or firing, and will leave no scar or blemish. It takes the place of all liniments for mild and severe action, and as a human remedy for sprains, rheumatism, sore throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Descriptive circulars and testimonials will be sent upon application by the makers of the remedy, the Lawrence-Williams Co., Cleveland, O.

—There are at least ten million nerve fibres in the human body.

MARKETS.

BOSTON LIVE STOCK MARKET.

Week ending Dec. 28, 1898.

Amount of Stock at Market.

	Cattle.	Sheep.	Shotes	Hogs.	Veals
This week,	2,908	4,625	92	38,434	865
Last week,	2,671	9,151	87	34,203	1,079

Values on Northern Cattle, etc.

Beef.—Per hundred pounds on total weight of hide, tallow and meat, extra, $6 00@6 50; first quality, $5 50@5 75; second quality, $5 00@5 25; third quality, $4 00@4 75; a few choice single pairs, $6 75@7 75; some of the poorest, bulls, etc., $3 00@$3 50.

Cows and Young Calves.—Fair quality, $20@35; extra, $40@48; fancy milch cows, $50@65; farrow and dry, $12@25.

Stores.—Thin young cattle for farmers: yearlings, $10@20, two-year-olds, $14@30; three-year-olds, $22@40.

Sheep.—Per pound, live weight, 2½@3c; extra, 3¼@4¼c; sheep and lambs per head, in lots, $2.50@$4 50; lambs, 4¾@5½c.

Fat Hogs.—Per pound 3⅜@3⅞c, live weight. shotes, wholesale ...; retail, $1 00@$5 50; country dressed hogs, 4⅜c.

Veal Calves.—3@6½c ℔ lb.

Hides.—Brighton, 7¾@8c ℔ lb; country lots, 7@7½c.

Calf Skins.—65c@$1.30. Dairy skins, 30c to 40c.

Tallow.—Brighton, 3@3½c ℔ lb; country lots, 1½c.

Pelts.—50@65c each; country lots, 25@50c.

ARRIVALS AT THE DIFFERENT YARDS.

	Cattle.	Sheep.	Hogs.	Veals.	Horses.
Watertown,	703	4,563	18,942	416	201
Brighton...	2,205	62	19,492	449	75

	Cattle.	Sheep.
Maine. At Brighton.		
P A Berry	10	
P W Thompson	32	
C E Hanson	34	5
Harris & Fellows	23	55
Libby Bros	34	
M D Holt & Son	22	
F L Howe	9	
New Hampshire. At Brighton.		
R W & A C Foss	27	
J H Neal	16	
At Watertown		
A F Jones		11
R W Foss & Son	16	
Breck & Wood	25	29
W F Wallace	36	2
Vermont. At Brighton		
Carr & Williamson	19	30
G H Sprigg	19	17
W Ricker & Son	6	4
M G Flanders	27	
Fred Savage	25	4
H N Jenne	36	2
H B Combs	20	
W A Farnham	35	11
C H Kidder	200	

	Cattle.	Sheep
J A McLeon	16	
Stranger	28	
Canada At Watertown		
Consignments		2100
J A Hathaway		1500
Massachusetts. At Watertown.		
J S Henry	28	
O H Forbush	23	
At Brighton		
J S Henry	59	2
R Connors	10	
Scattering	80	
H A Gilmore	25	
Western At Brighton.		
J White & Co	18	
Swift & Co	626	
Morris Beef Co	1008	
Sturtevant & Haley	68	
At Watertown.		
G A Sawyer	18	218
Western	34	1200
Consignments	226	435
J A Hathaway	100	

Export Traffic

The supply of State cattle and home bred was comparatively heavy with a steady market as regards prices. The trade not excessive, and the wants easily supplied. American steers of good to best quality sold, sinking the offal, at London at 11@12c, and at Liverpool 11½@12c. The week's shipments from Boston were 1660 cattle and 1500 sheep.

Shipments and destinations: On steamer Lancastrian for Liverpool, 507 cattle by Swift & Co; on steamer Irishman, for Liverpool (a new boat), 503 cattle by Morris Beef Company; 1500 sheep by J. A. Hathaway; on steamer Columbian, for London, 390 cattle by Morris Beef Company; 260 cattle by Swift & Co.

Horse Business.

Considerable many horses changed hands during the week, and dealers called it a fair winter's trade, both for drive and draught horses at steady prices. At Snow's Combination Sale Stable, the Wednesday's auction sale was good, and Western and nearby horses changed hands at $75@ 75. At L. H. Brockway's Sale Stable, had in 4 carloads and sold out the best part of them. Horses sold well on Wednesday at $60@ 30. At A. W. Davis's Northampton-street Sale Stable were collected an attractive sale of speed, drive, coach and saddle horses, from $ 0@450. At E. Ham & Co.'s Sale Stable, sales moderate, at $ 00@200. At Welch & Hall's Sale Stable the trade better than expected, and shippers satisfied with their investments. Trade improving with Russell & Drew.

Union Yards, Watertown.

Tuesday, Dec. 28, 1898.

The arrivals of cattle are light this week as butchers did not care to venture large supplies right in the face and eyes of an overloaded market of dressed poultry, and they were about right in their decision. The market would not warrant large run of cattle, and then they cost high in the West, and it would be a good time now to ship in country cattle. Western cattle cost 5c@$5.80 ℔ cwt. laid down here. O. H. Forbush sold 20 odd head of beef cows and bulls at 2¼@3½c l. w. W. F. Wallace sold 1300-lb bulls at 2½c. J. A. Hathaway sold 15 steers, av. 1550 lbs. at $5.80, 15, of 1525 lbs, at 5¾c, 10, of 1500 lbs, at 5½c, 10, of 1475 lbs, at 5⅝, 20, of 1460 lbs, at 5¼c, 15, of 1450 lbs, at 5c.

Sheep Houses.

The lightest run of any week of the year, and 1500 of them went for export. Western lambs hold a steady position at 5½c, what they cost here, and Western sheep 4¼c, and these prices are a grain stronger than Canada. Country lots do not come up in quality with the above and generally rule lower. W. F. Wallace sold 130 lbs sheep at 3½c. H. N. Jenne sold a light flock on commission.

Milch Cows and Springers.

The movement less active, with sales at $20@65, including fancy.

Veal Calves.

Market about as we found it last week. Butchers do not hanker for them as earlier in the season. They range 5@6½c, as to quality. W. F. Wallace sold 3 calves, 4730 lbs, at 5½c. R. W. Foss sold several lots at 5@6c. J. S. Henry sold as last week.

Fat Hogs.

Western higher. The range 3⅝@3⅞c; country hogs, 4⅜c d. w.

Live Poultry.

One and a half tons at 9@10c ℔ lb.

Droves of Veal Calves.

Maine—P. A. Berry, 16; P. W. Thompson, 14; C. E. Hanson, 30; Harris & Fellows, 50; Libby Bros., 38; M. D. Holt, 47; F. L. Howe, 15.

New Hampshire—R. W. & A. C. Foss, 12; J. H. Neal, 8; R. W. Foss & Son, 12; Breck & Wood, 25; W. F. Wallace, 59.

Vermont—Carr & Williamson, 6; G. H. Sprigg & Co., 2; W. Ricker & Son, 40; M. G. Flanders, 40; Fred Savage 70; H. N. Jenne, 15; H. B. Combs, 2; W. A. Farnham, 58; J. A. McLeon, 6; B. M. Ricker, 11.

Massachusetts—J. S. Henry, 160; R. Connors, 8; scattering, 100; H. A. Gilmore, 12.

Brighton, Tuesday and Wednesday.

Dec. 27 and 28, 1898.

Stock at yards: 2205 cattle, 62 sheep, 19,492 hogs, 449 calves and 75 horses. From West, 1720 cattle, 9 400 hogs, 75 horses; Maine, 268 cattle, 60 sheep, 209 calves; New Hampshire, 43 cattle, 24 hogs, 20 calves; Massachusetts, 174 cattle, 2 sheep, 68 hogs, 220 calves.

A good run of cattle noticed at these yards, several hundred in excess of last week, but many of them were for outgoing steamers. The tone of the market for cattle, if anything, was a grain stronger than the previous week, and firm prices West. Butchers were ready to help the owners out and relieve them of their stock. A. B. Locke sold 2 cattle, of 3280 lbs, at 5c; 1 ox, of 1470 lbs, at 4½c. J. H. Neal sold 2 cattle, of 3500 lbs, 2 of 32 0 lbs, 2 of 3050 lbs, 2 of 2990 lbs, 2 of 3440 lbs, 2 of 3260 lbs, 2 of 2570 lbs, 1 of 1460 lbs, at 4¾c. This was an average price; some not worth near that figure; 1 bull, of 1300 lbs, at 3¼c. R. Connors sold 1001-pound beef cows at 3½c. P. Thompson sold 2 cattle, of 3080 lbs, at 5¼c, 2 of 3160 lbs, at 5⅝c. P. A. Berry sold 1250-lb round steer at 4c.

Late Arrivals and Sales.

Late arrivals of 4 cows, State cattle, mostly for beef. The demand for cattle steady at Tuesday's rates. For milch cows the movement was not active, and buyers will be favored somewhat. Milch cows cost too much in the country to be a benefit to dealers. Libby Bros. sold 4 nice cows at $6 a head, 2 springers at $35 each and cows at $40@48. R. Connors sold 1 cow at $45, and sales at $35@50. C. E. Hanson sold 10 cows (young) $35 each. P. W. Thompson sold 8 cows at $40@60. W. F. Wallace sold 30 cows to sell again at $35@5 , R. W. & A. C. Foss sold 1 two-year-old Jersey bull, for breeding, $33. J. S. Henry sold cows at $30@55. Harris & Fellows, sales from $35@5 .

Store Pigs—Suckers, $1@2; shotes, $3.50@5.50.

Milch Cows and Springers.

The cow business not hardly satisfactory. They cost too much in the country to let dealers out with a margin in their favor. One dealer stopped over from last Wednesday with 3 milch cows, and disposals were effected only at a discount of $ a head. Libby Bros. sold 6 milch cows of extra quality at $45 each. 0 springers at $40@42 a head, and sold various cows at $23@38. J. S. Henry sold cows at $30@55. R. Connors sold 10 cows at $40 each.

Veal Calves.

Sales at 5¼c, 5½c, & 5¾c, 6@6¼c ℔ lb, according to quality. C. E. Hanson sold 24 calves, of 140lbs, at 6¼c. P. W. Thompson, 14 calves, of 130 lbs, at 6½c. J. H. Neal sold calves at 6c. P. A. Berry sold calves at 5½c. J. S. Henry sold at 6c.

Boston Produce Market.

Wholesale Prices.

Poultry.

Fresh Killed.

Northern and Eastern—	
Chickens, choice large, ℔ lb	12@13
Chickens, common to good	9@11
Fowls, extra choice	10@
Fowls, common to good	8@9
Turkeys choice large young ℔ lb	13@
Turkeys com. to good young	10@12
Geese, per lb	10@12
Ducks, spring ℔ lb	9@11
Pigeons, tame ℔ doz	75@1 00
Western dry packed—	
Turkeys, choice drawn	11½@12
Turkeys, common to good	9@10
Chickens, choice	9@10
Chickens, com. to good	7@8
Fowls, good to choice	8@9
Ducks, good to choice	7@9
Geese, good to choice	9@11
Old Cocks	5½@6

Live Poultry.

Fowls ℔ lb	8@9
Roosters ℔ lb	5@
Spring Chickens ℔ lb	7@8

Game.

Partridges, native ℔ pair	1 00@1 15
Partridges, western ℔ pair	75@ 95
Grouse, ℔ pair	90@1 30
Quail, good to choice, ℔ doz	1 25@1 50
Venison, fresh saddles, ℔ lb	12@14

Butter.

Note.—Assorted sizes quoted below include 20, 30, 50 lb. tubs only.

Creamery, extra—	
Vt. & N. H. assorted sizes	21½@
Northern N. Y., assorted sizes	20½@21
Northern N. Y., large tubs	20@20½
Western, asst. spruce tubs	2 @21½
Western, large ash tubs	20½@21
Creamery, northern firsts	18½@19½
Creamery, western firsts	17@18
Creamery, seconds	15@16
Creamery, eastern	18@20
Creamery, western June extra	19@19½
Creamery, western June firsts	18@18½
Dairy, Vt. extra	18@19
Dairy N. Y. extra	18@
Dairy, N. Y. and Vt. firsts	15@17
Dairy, N. Y. and Vt. seconds	14@
Dairy, N. Y. and Vt. low grades	13@
Dairy, western	13@14
West. imitation creamery, small tubs, extra	15@16
West imitation cr'y. large tubs firsts	14@15
" imitation creamery seconds	13@
" ladle firsts	13½@
" ladle seconds	13@
Boxes	
Extra northern creamery	21½@22
Extra western creamery	21½@
Extra dairy	19@
Common to good	16@18
Trunk butter in ½ or ¼ lb prints	
Extra northern creamery	21½@22
Extra northern dairy	20@
Common to good	16@18
Extra western creamery	21½@

Cheese.

Liverpool quot. white 44s. 6d	
New York, small, extra ℔ lb	10¾@11
" " first ℔ lb	9@10
" " large extra ℔ lb	10½@
Vermont, small extra ℔ lb	10½@10¾
" firsts ℔ lb	9@10
" seconds ℔ lb	7@ 8
Part skims ℔ lb	@
Western twins, extra	10½@
Sage cheese, extra, ℔ lb	11@

Eggs.

Nearby and Cape fancy ℔ doz	30@
Eastern choice fresh	25@27
Eastern fair to good	18@20
Vt. and N.H. choice fresh	25@27
Western fair to choice	18@24
Western selected, fresh	26@
Ohio, Ind. and Ill. selected, fresh	24@25
Far western, fresh gathered	22@24
Refrigerators, early packed, choice	19@
Refrigerators, fair to good	17@18
Limed	16@16½

Potatoes

Aroostook Co. & Heb. ℔ bush	60@62
Aroostook Green Mountain	70@
York State, Green Mountains	55@
York State, Burbanks	48@50
Western Green Mountains	50@55

Sweet Potatoes.

Va. extra yellow ℔ bbl	@
Va. fair to good yellow	@
Jersey extra double head ℔ bbl	2 00@2 25

Green Vegetables.

Beets native ℔ bushel	40@50
Cabbage ℔ bbl	75@
Carrots ℔ bu	50@60
Cress, ℔ bunch	04@ 05
Celery ℔ doz	1 20@1 70
Lettuce, hot house ℔ doz	60@75
Onions, native yellow ℔ bbl	1 50@2 00
Onions, yellow, in bulk ℔ bush	50@60
Parsnips ℔ bu	50@60
Parsley ℔ bu	1 50@
Radishes, ℔ doz	30@40
String beans—	
Common green southern ℔ bskt	2 75@3 25
Squash, native marrow, ℔ bbl	40@
Squash, Bay State and Turban ℔ bbl	50@
Squash, Hubbard, ℔ ton	10 00@12 00
Spinach, Baltimore, ℔ bbl	50@75
Turnips, Russia, ℔ bbl	1 00@
Turnips, yellow ℔ bbl	70@85
Turnips, St. Andrews, ℔ bbl	65@75
Tomatoes, hot house, ℔ lb	25@45

Domestic Green Fruit.

Apples—	
No. 2 Apples ℔ bbl	1 75@2 25
Snow ℔ bbl	2 50@3 50
Talman Sweet ℔ bbl	2 00@3 00
Baldwins No. 1 ℔ bbl.	2 75@3 25
King, ℔ bbl.	3 50@4 00
Greenings No. 1 ℔ bbl	2 75@3 25
Grapes—	
Western N. Y.—	
Catawba, pony basket	10@14
Cranberries—	
Cape Cod, choice dark ℔ bbl	6 00@
Cape Cod, com. to good ℔ bbl	5 00@5 50
Cape Cod, com. to good ℔ box	1 75@2 00
Country, good to choice ℔ bbl	5 00@5 50

Nuts.

Chestnuts, northern, bush. 60 lbs	3 00@
Chestnuts, Pa. and Md., bush. 60 lbs	2 50@3 00
Chestnuts, southern, bush. 60 lbs	1 00@2 00
Hickory Nuts ℔ bush 50 lbs	3 00@3 50
Peanuts, Va., H. P. No 1 ℔ lb	3½@3¾
Peanuts, Va. No. 2 ℔ lb	2½@2¾

Tallow.

Rough, ℔ lb	1½@2
Rendered	2½@3

Honey.

York State—	
Clover, comb, fancy ℔ lb	13@
Clover, comb, fair to good ℔ lb	11@12

Hides and Pelts.

Steers, over 75 lbs	7@
Cows all weights; steers under 75 lbs	7@
Bulls	6@
Hides, south. light green salted	8¼@8½
" " dry flint	15@15½
" " salted	14@14½
" buff, in west	9⅜@9¾
Calfskins, 5 to 12 lbs each	65@1 40
" overweights, each	1 50@
" south, flint dried ℔ lb	11@12
" " salted ℔ lb	9@10
Deacon and dairy skins	30@40
Shearlings each	10@15
Lambskins each spring	25@40
Pelts, each	50@70

Peas.

Choice Canadian ℔ bu	90@
Common " "	70@80
Green peas, Western choice	80@85
Green peas, Scotch	95@1.00

Dried Apples.

Evaporated, fancy to extra fancy	9½@10
Evaporated, choice	9@9½
Evaporated, prime	8½@8¾

Grass Seeds.

Timothy, ℔ bu	1 40@1 85
Clover, ℔ lb	6½@9
Red Top, western, ℔ 50 lb sack	2 00@2 25
" fancy recleaned, ℔ lb	9@10

Beans.

Pea, N.Y. & Vt. small H. P.	1 50@
Pea, marrow, choice, H. P	1 25@
Pea, screened	1 10@1 20
Pea, seconds	90@1 00
Mediums, choice hand picked	1 30@
Mediums, screened	1 10@1 20
Mediums, second	1 00@
Yellow eyes, extra	1 45@1 50
Yellow eyes seconds	1 20@1 40
Red Kidney	1 65@1 75
Lima beans, dried ℔ lb	4@

Hay and Straw.

Hay, prime, large bales	11 50@12 50
" " small "	10 50@11 50
Hay, No. 1, ℔ ton	10 00@11 00
" " 2 "	9 00@10 00
" " 3 "	6 00@ 7 00
" fine choice	7 00@ 8 00
" rejected, per ton	5 00@ 6 00
" clover mixed, ℔ ton	6 00@ 9 00
" clover, ℔ ton	6 00@ 7 00
" swale, ℔ ton	6 50@ 7 00
Straw prime new rye	7 50@ 8 00
Straw prime old rye	7 50@ 8 00
Straw, oat per ton	6 00@ 6 50
Straw tangled rye	6 50@

Flour and Grain.

Flour.—The market quoted steady.
Spring patents, 3 90.
Spring, clear and straight. $3 00@3 50.
Winter patents, $3 90.
Winter, clear and straight, $3 30@4 00.

Oat Meal.—Quoted quiet, $3 60@4 20 ℔ bbl for ground and rolled, and $4 00@4 60 for cut.

Corn Meal.—The market is quiet at 88@90c ℔ bag, and $1 95@2 00 ℔ bbl; granulated, $2 15@2 35 ℔ bbl; bolted, $2 15@2 35.

Graham Flour.—Trade continues quiet, with the market quoted at $2 75@4 00 ℔ bbl.

Rye Flour.—The market is quoted at $3 00@3 20 ℔ bbl.

Corn.—Demand is quiet with market firm.
No 2 yellow, spot, 43@45⅛.
Steamer yellow, spot 45¼c.
Steamer and No 3 corn, 43@43½c.
No. 2 yellow 45¼c.
No. 3 yellow 45c.

Oats.—Quiet but steady.
Clipped, fancy, spot, 36½@37c.
No. 2 clipped, white 36c.
No. 3 clipped, white 35@35½c.
Lower grades, spot, 34½@35c.
Clipped, to ship, 36½c.
Clipped white, old, 35¼@35¾c.

Millfeed.—The market is firm for all kinds.
Middlings, sacked, $14 00@17 00.
Bran, spring, $14 25.
Bran, winter, $15 00.
Red Dog, $17 50.
Mixed feed, $15 50@17 00.
Linseed meal, $26 00.
Cottonseed meal to ship, $20 75.

Malt.—The market is steady with trade ruling dull.
State grades, 6-rowed, 58@63c.
State, 2 rowed, 53@55c.
Western grades, 53@60c.

Barley—Quiet demand, with prices nominal at 50@75c. for No. 2 6-rowed State, and 42@50c for No. 2 2-rowed State.

The Wool Market.

Unwashed fleece, fine, Michigan	16@17
" " " Ohio	18@20
" " ¼-blood "	21½@22
" " ⅜ blood "	23@
" " ½-blood "	22@
Fine delaine, Ohio	28½@29
" " Michigan	27@
Washed fleece	27@30

Domestic and Foreign Fruit.

There has been but light receipts of apples, and with a steady demand prices advance about 25 cents a barrel, and even 50 cents on choice table fruit. We find Snows at $2.50 to $3.50 a barrel, and Kings at $3 50 to $4. Baldwins and Greenings $2.75 to $3.25, and a few fancy Baldwins have sold at $3 50, cooking fruit, No. 2, at $1.75 to $2.25, Talman sweets $2 to $3. Cranberries in fair demand and advancing in price. Cape Cod choice dark are at $6.50 to $7, fair to good $5 to $6 a barrel, and $1.75 to $2 a box. Country good to choice at $5 to $5 75. But few grapes in. We find only Catawba, pony baskets at 12 to 14 cents.

Florida oranges are in fair supply, and only a fair demand for this season. They are steady at $3 75 to $4 for choice bright, and $3 to $3 50 for fair to good. Florida tangerines, quarter boxes, $4.25 to $5. Florida grape fruit, $6 25 to $7 for fair to good, and $7.25 to $8 for choice to fancy. California navels at $2.75 to $3.25 for fair to good, $3.50 to $4.50 for choice to fancy, per box, and $2 to $2 50 for half boxes. Seedlings seem to arrive in better condition than last week, and range from $2 35 to $3 a box. Valencia oranges at $5 to $5.50 a case, with a few 714 counts at $5.25 to $6. Jamaica oranges steady at $3.25 to $3 50 for fair to good, and $3 75 to $4 in boxes, and $5 50 to $6 50 a barrel for good to choice. Some barrels in poor condition $3 25 to $4.50 as they arrive. Jamaica grape fruit variable and at $2 50 to $3.00 for poor to ordinary, $3 25 to $3.75 for fair to good, and choice to fancy $4 to $4.75 a box, barrels at $6 to $8 50, according to condition. Messina and Palermo oranges in but small supply, at $1.75 to $2 for ordinary, fair to good $2.25 to $2 75, and choice to fancy $3 to $3.50 a box. Messina and Palermo lemons dull at $2.50 to $3.25 for 300 counts and $2.25 to $2.75 for 360 counts; a few fancy Palermos are held at $4 to $4.25.

Bananas are steady, $1 to $2 a stem for Baracoa yellow, Jamaica No. 1 $1 25 to $1 75, and eight hands 85 cents to $1. Small pineapples quiet at $8 to $10 per hundred. Some Jamaicas at 40 to 50 cents each. Turkish figs 17 to 25 cents a pound, and California 11 to 13 cents. New dates 5 cents. We notice no change in nuts. A fair trade, and prices well sustained. Shellbarks and best Northern chestnuts growing scarce. Almeria grapes from $2.50 to $6 50 a barrel, according to size of barrel, color and condition of grape.

Vegetables in Boston Market.

The vegetable trade starts very good this week, as milder weather favors both shipper and buyer, but the dealers expected a good trade and have enough to supply all demands, and the market is likely to continue to New Year's without any great fluctuations in prices. This has been so marked a characteristic of the vegetable trade all the season that there has hardly been an overstocked market or any scarcity on anything.

Beets, carrots and parsnips are steady at 50 to 60 cents a bushel, flat turnips 40 cents, sweet German 90 cents to $1 a barrel, and yellow 75 to 90 cents. Native onions in fair demand at $1.50 a barrel, leek 40 to 50 cents a dozen, salsify 75 cents to $1, and radishes 25 to 35 cents. Celery is in fair supply from $3 50 a box up to $5, with most of it at $4.25 to $4.50. Artichokes dull at $1 to $1.25 a bushel. Good cucumbers from $7 to $10 per hundred, and seconds at $8 to $5. Green peppers $1 a bushel.

Cabbages 75 cents to $1 a barrel, cauliflower $1.20 to $1.80 a dozen, and sprouts 12 to 15 cents a quart. Lettuce steady at $1.75 to $2 a box. Southern spinach lower and very good at 75 cents to $1 a barrel. Native spinach scarce, 40 to 50 cents a box if good. Endive, 50 cents a box. Parsley is scarce as $1 50 a box. Asparagus is in at 75 cents a bunch. Hothouse tomatoes are higher at 30 to 40 cents a pound, no Southern tomatoes in market now. Egg plant $2 to $2 50 for an orange-boxful. String beans still $3 to $4 a crate. Marrow squash 40 cents a barrel, Bay State and Turban 40 to 50 cents and Hubbards dull at $10 to $12 a ton.

Potatoes are in very light supply, and the price advances again 60 or 63 cents a bushel for choice Aroostook and Eastern Hebrons Green Mountains 65 to 67 cents, New York Green Mountains 55 cents, White Star and Burbank 50 to 55 cents, and Dakota Red 48 to 52 cents. Sweet potatoes are quiet in small demand, at $1.75 a barrel for Jersey double heads.

Boston Exports and Imports.

The exports from Boston for the week ending Dec. 16 amounted to $2,726,045, and the imports to $659,739. Excess of exports $2,066,306. For corresponding week last year the exports were $2,358,086, and the imports $564,833. Excess of exports $1 793,254 Since Jan. 1 the exports have been $117,880,386, and the imports $47,207,709. Excess of exports $70,672,677. For corresponding period last year the exports were $99,347,637, and the imports were $83,228,691. Excess of exports $16,118,946. Of last week's exports England received $2,362,834, Scotland $142,250, Ireland $1350, Nova Scotia and Provinces $46,474, British East Indies $28,655, British possessions in Africa $13,608, Malta $1137 and Gibraltar $1034, a total of $2,597,342 to Great Britain and her colonies. Germany had $51,414, Denmark $24,484, Netherlands $16,455, Sweden and Norway $14,212, Argentine $4231, Turkey in Asia $3672, Belgium $10,488, and other countries less than $2500 each. The principal articles of export were: Provisions, $1,116,406; breadstuffs, $491,495; live animals $200,590; cotton, raw, $378,819; do. manufactured, $40,036; leather tanned, $234,464; wood and manufactures of same, $43,763; sewing and other machinery, $41,964; iron and manufactures, $12,289; hardware, $17,479; India rubber manufactures, $4610; paper, $14,465, tallow, $8631; grease, $2275; oil cake, $1805; spirits, $11,161; tobacco, $2850; organs and pianofortes, $7287; fruits, $11,241; blacking, $4958; books, $3642; brass manufactures, $3527; drugs and chemicals, $7472.

Boston Fish Market.

With milder and more pleasant weather the fishermen have been able to bring in larger fares, and there seems no danger of a lack of fish for the fast days that are to come in this month and next, but so many fishing vessels with their crews have been lost in the storms that our markets must be less plentifully supplied than they have been. We find prices quite a little lower than a week ago, with a quiet trade and steady demand. Market cod is 3 to 3½ cents a pound, with large at 2½ to 3 cents, and steak at 4½ to 5 cents. Haddock 4 to 4½ cents, hake 3 to 3½ cents for medium to large and 2 to 2½ cents for small. Pollock, market at 3½ to 4 cents and steak at 4½ to 5 cents. White halibut 15 to 16 cents. Salmon, Oregon frozen at 9 to 10 cents, and Eastern frozen 17 to 18 cents. Blue fish 9 to 10 cents and lake trout 10 to 11 cents. Cusk 2 to 2½ cents for small, and steak at 2½ to 3 cents. Bull heads 11 to 12 cents. Smelts, eastern, eight to nine cents, and native 17 to 18 cents. Oysters in fair supply. Norfolk, standard 90 cents per gallon. Providence River, $1.15, and fresh opened Stamfords $1.25. In shell, Blue Points, $2.50 per bushel and $7 25 per barrel. Others $1.75 a bushel, and $6.50 a barrel. Clams steady at 60 cents a gallon. Scallops plenty at $1.25 a gallon. Lobsters firm at 16 cents a pound alive, and 18 cents boiled.

—East-bound shipments dead freight by all rail routes from Chicago last week were 103,692 tons. The previous week 113,283 tons. Corresponding week last year 82,728 tons.

—The exports of live animals and dressed beef last week included 1472 cattle, 1041 sheep, 13,652 quarters of beef from Boston; 1352 cattle, 40 sheep, 8655 quarters of beef from New York; 669 cattle, 1372 sheep, 1467 quarters of beef from Baltimore; 272 cattle, 680 sheep from Portland; 715 cattle from Newport News, and 344 cattle from Norfolk, with 1200 quarters of beef from Philadelphia; a total from all ports of 4824 cattle, 3233 sheep and 24,984 quarters of beef. Of these 2941 cattle, 2413 sheep, 22,103 quarters of beef went to Liverpool; 1478 cattle, 780 sheep, 2881 quarters of beef to London; 344 cattle to Glasgow; 61 cattle and 40 sheep to Bermuda and West Indies.

—There are between 20,000 and 30,000 Christmas trees in Boston this year, but this is probably less than last year's supply, and as the demand has been brisk early in the week it is probable that they will be well sold out early. Bunches of ten trees sell from $2 to $3 a bunch for large ones, and small trees as low as 75 cents a bunch. Holly and other evergreens are in short supply because of the deep snow since Nov. 28.

—The wool market has been more active this week, sales being nearly 1,000,000 pounds more than last week, and more than 2,000,000 more than for corresponding week last year. No quotable advance in prices, but grades, of which there is a light supply, are firmer, and some sellers claim to have obtained prices a little better than on some previous sales.

—The shipments of leather from Boston for the last week amounted in value to $166 881; previous week, $148,974; similar week last year, $58,556. The total value of exports of leather from this port since Jan. 1 is $10,183,375, against $7,854,033 in 1897.

—The total shipments of boots and shoes from Boston this week have been 93,308 cases, against 59,360 cases last week, 115,224 cases for the corresponding week last year, 91,672 in 1896. The total shipments thus far in 1898 have been 4,160,937 cases, against 4,002 464 cases in 1897, 3,787,341 in 1896.

—The visible supply of grain in the United States and Canada Dec. 17 included 30,559,000 bushels of wheat, 18,153,000 bushels of corn, 6,009,000 bushels of oats, 1,126,000 bushels of rye and 4,169,000 bushels of barley. Compared with one week previous, this shows an increase of 3,821,000 bushels of wheat 307,000 bushels of corn, 648,000 bushels of oats and 167,000 bushels of barley, with a decrease of 102,000 bushels of rye. Dec. 18, 1897, the supply was 35,565,000 bushels of wheat, 38 539,000 bushels of corn, 14,383,000 bushels of oats, 3,645,000 bushels of rye and 4 605,000 bushels of barley.

—Cold weather and snowdrifts are the cause of a short supply in the potato market, and prices have advanced again, with market firm on good Eastern stock.

—Stocks of butter and eggs in Quincy Market Cold Storage Company Dec. 19: Butter, 75,213 packages; last year, 76 413 packages. Eggs, 19,651 cases; last year, 24,386 cases. Stocks of butter and eggs in Eastern Cold Storage Company Dec. 19: Butter, 8779 packages; eggs, 1379 cases.

—The total apple shipments in barrels to European ports during the week ending Dec. 17, 1898, were: From Boston 442, New York 5870, Portland 10,050, Halifax 4608, St. Johns, N. F., 1821, total for week 22,791; same time 1897 9982; total since season opened 879,745; same time 1897 592 518; same time 1896 2,115,627. Shipments in detail have been: From Boston 173,342 barrels, New York 112,109 barrels, Portland 44,199 barrels, Montreal 400,164 barrels. Halifax 130,158 barrels, St. Johns, N. F., 13,773 barrels. Last year to date they were: From Boston 126,136 barrels, New York 235 744 barrels, Portland 23,292 barrels, Montreal 159,662 barrels, Halifax 43,993 barrels, Philadelphia 3691 barrels. Total shipments are: 257,237 barrels more than at same date in 1897 and 1,235,882 barrels less than at same date in 1896.

—The exports from the port of Boston for the week ending Dec. 17, 1898, included 269,405 pounds butter, 731,790 pounds cheese and 20,000 pounds oleo. For the same week last year the exports included 11,287 pounds butter, 528,130 pounds cheese and 81,987 pounds oleo.

—Exports of general merchandise from the port of New York for the week ending today were valued at $10,151,821, against $9,025,816 in the preceding week, and $9,136,366 in the same period last year. Since Jan. 1, $448,447,255, against $383,451,176 in the same period of last year.

—Trafton makes the exports from the Atlantic coast last week to included flour 497 000 barrels, 3,523,000 bushels wheat, 3,978,000 bushels of corn, 4460 barrels of pork, 12,813,000 pounds of lard and 30,624 boxes of meats.

—The world's wheat exports last week are reported as 6,076,625 bushels of wheat, counting flour as wheat from the United States, 876,000 bushels from Russia, 264,000 bushels from India and 168,000 bushels from the Danube; a total of 7,384 625 bushels. Same week last year a total of 6,756,399 bushels, of which 4 604,399 was from the United States.

—Since the surrender and occupation of the province of Santiago de Cuba, the United States had received on custom duties up to Dec. 1 the sum of $825,636.11. During the month of November the collections were $50,245.86 at Santiago port, and $10,381.25 at other ports. In November, 1897, the collections were $48,830 36 at six ports, or less than we collected at Santiago alone. The expenses and salary for collecting customs at Santiago were $2,648.36.

—Bradstreet's reports the exports of wheat (flour included as wheat) from both coasts last week 6,076,625 bushels, compared with 6,868,952 bushels the previous week, and 4,604,399 bushels in the week a year ago. Corn exports from both coasts last week 3,251,936 bushels compared with 4,388,535 bushels the previous week, and 4,129,878 last year.

—Fresh eggs are in good demand, and prices rule firm on a basis of 26 to 27 cents for choice fresh Michigan and northern Indiana and Ohio, and 22 to 25 cents for other Western. Really desirable eggs are hard to find. Fresh Eastern command 26 to 28 cents, and fancy new laid go much higher. Refrigerators have been selling the past few days at 18 to 19 cents, and choice spring lots were very firm yesterday at 19 cents, with an upward tendency. The stock in cold storage is reduced to 19,651 cases, against 24,386 cases at the same time last year.

Sheep Losing Their Wool.—J. M. G., Norwich, N. Y.: Even the most careful flock master makes the mistake sometimes of trying to winter a sheep that had better have been disposed of the year before. If your grade six-year-old sheep is becoming bare on her belly, that is probably your mistake now. You cannot put back wool where it has once fallen off, for that fact is evidence of inflammation, which has destroyed the roots, which, so long as they are in health, cause wool to grow. We have fussed around one or two old sheep, but spite of all the care we could give them, all whose wool fell off early in winter died before spring. Probably the lack of wool, where previous years it was plentiful, exposes the sheep to colds, and these kill them. Prevention of loss of wool is possible. It is secured by the greatest care never to give an old sheep what will be likely to ferment in its stomach. It is fermentation of food that causes fever, and this dries up the roots from which the wool grows, after which, of course, there is nothing to prevent it from falling off. Even young, fattening sheep have loose wool on their bellies when they are over fed with corn. There is one way to cure this. Give no grain, except a few orts mixed with equal weight of wheat bran, which will make a greater bulk of the bran. Feed from a quarter of a pound to a third of a pound of this mixture a day, and let the sheep have what clover hay it will eat up clean. If this is eaten readily, a teaspoonful of linseed oil meal may be added to the night feed each day. A few discolored beans may be given occasionally, and lessen the amount of the orts. All these feeds have just the nutrition to make wool growth, and they are excellent to feed to sheep during the winter.

Time to Breed Young Sows.—G. R., Pawlet, Vt.: It is best to breed now last spring's sow pigs that are intended to be kept as breeders, for they will develop better milk capacity than those that are kept until spring before breeding. It is not likely nor desirable that the young sow will drop as many pigs in her first litter as she is later able to produce, and she must be fed pretty well to enable her to come in heat during these short and cold days. The seasons when the sow is in heat do not last so long in a young sow, and may be overlooked if she is kept alone. If with another pig, either male or female, they will be evident enough. As good a plan as any is to turn the sow with a boar, and keep watch when the mating takes place. The gestation of a sow is from 16 weeks to 115 or 116 days. So if the sow is made pregnant in December she will be due to farrow some time in April, which is early enough for a sow's first litter. All the sows kept for breeding should be from sows two years old or older.

PIGS ON MANURE HEAPS.

It is always a good plan to allow hogs to have access to the manure piles thrown from horse or cattle stables, and the hogs should at this season be left unringed so that they may root freely. They will find more or less grain which has passed through the excrement. It is better than feeding the grain while animals are at pasture where their excrement is scattered and dries up before it can ferment. Left thus in its crude state on the ground manure does very little good.

A COW FOR EVERY ACRE.

We do not hear so much as we used to do about the importance of producing enough feed on each acre to keep a cow through the year. It can be done by growing corn as the main feed. But that is not always, nor generally, economy, for if all the land is kept in corn it must require more manure than where it can be every three or four years seeded with clover, and after all the soil would be less fertile than after a clover seeding. Besides, more depends on the milking character of the cows than on their number. The best dairymen prefer rather to reduce their herds in number, and still get as much milk and butter as formerly. This makes the labor much less, and if the lessened number of cows leaves more land not needed to keep them, it can probably be given to other uses that will pay much better.

CORN FIELDS IN WINTER.

How many of the fields that produced corn crops last year have anything on them now except possibly those where the cultivation was poor, and weeds remain to shame the owner. The bare corn field is no better pulverized by winter freezing than if some fall crop were sown, and left in winter to cover its nakedness. Wherever crimson clover will live through the winter, that is, of course, best, as winter earth covering, for it will often make considerable growth in the spring. But there should be something sown, if only oats or peas. A mixture of both these grains would probably make a better winter protection to the soil than either alone. These will not live after heavy freezing, but their leaves will make a mulch that will protect the surface from being beaten down by rains. When this mulch is plowed under, it should not be buried more than three or four inches. The cutaway harrow will do it deeply enough.

GUESSING WEIGHT OF STOCK.

As this is "butchering time" on thousands of farms one of the best ways of training the eye to judge both of live and dressed weights of animals is now offered. If the farmer has some barn scales it is easy to secure the live weight of animals at any time, But there is great difference in the amount of waste in killing and dressing, even among animals of the same breed It is this kind of knowledge that the buyer learns by long practice, and unless farmers want to be cheated in selling live stock they must learn also. When a boy on the farm the writer was encouraged to make his guess as to how much each hog or beef would weigh, both alive and after it was dressed for marketing. It is knowledge that every boy on the farm should try to gain.

DRAINAGE FOR HOUSE PLANTS.

Plants kept in pots in winter often suffer from too much water, making the soil compact and rotting their roots. They are much better kept somewhat dry, as during winter there is little growth, unless the plant is kept close by the stove, and the foliage exhales little moisture. Some gravel should cover the bottom, through which surplus water will filter through to the hole which is provided for this very purpose in all flower pots.

....His portrait 'midst the news you scan,
This is the fame for which men fight;
From the next column glares the man
Who burglarized a bank last night.

ANNUAL MEETING.

The annual meeting of the New England Agricultural Society will be held on the first Tuesday in February, 1899, at Wesleyan Hall, No. 36 Bromfield Street, Boston, at 11 A. M., for the election of officers and the transaction of any other business that may properly come before the meeting.

FRANCIS H. APPLETON, President.
E. T. ROWELL, Secretary.
Lowell, Mass., December 28, 1898.

Commonwealth of Massachusetts.

MIDDLESEX, ss.
PROBATE COURT.

To the heirs-at-law, next of kin, creditors and all other persons interested in the estate of ISAAC BRADFORD, late of Cambridge, in said County, deceased, intestate.

WHEREAS, a petition has been presented to said Court to grant a letter of administration on the estate of said deceased to ISAAC BRADFORD of Cambridge, in the County of Middlesex, without giving a surety on his bond.

You are hereby cited to appear at a Probate Court to be held at Cambridge, in said County of Middlesex, on the twenty fourth day of January, A. D. 899, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And the petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Witness, CHARLES J. McINTIRE, Esquire, Judge of said Court, this twenty-eighth day of December, in the year one thousand eight hundred and ninety-eight.

S. H. FOLSOM, Register.

Commonwealth of Massachusetts.

MIDDLESEX, ss.
PROBATE COURT.

To the heirs at law, next of kin and all other persons interested in the estate of THERESA FORAN, late of Somerville, in said County, deceased.

WHEREAS, a certain instrument purporting to be the last will and testament of said deceased has been presented to said Court, for probate, by Cornelius J. Foran, who prays that letters testamentary may be issued to him, the executor therein named, without giving a surety on his official bond.

You are hereby cited to appear at a Probate Court to be held at Lowell, in said County of Middlesex, on the seventeenth day of January, A. D. 1899, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted. And said petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court, and by mailing, postpaid, or delivering a copy of this citation to all known persons interested in the estate, seven days at least before said Court.

Witness, CHARLES J. McINTIRE, Esquire, Judge of said Court, this twenty eighth day of December, in the year eighteen hundred and ninety-eight.

S. H. FOLSOM, Register.

Commonwealth of Massachusetts.

MIDDLESEX, ss.
PROBATE COURT.

To the heirs-at-law, next of kin, creditors and all other persons interested in the estate of JOHN F. KELLEHER late of Melrose, in said County, deceased, intestate.

WHEREAS, a petition has been presented to said Court to grant a letter of administration on the estate of said deceased to Robert M. Kelleher, of Boston, in the County of Suffolk, without giving a surety on his bond.

You are hereby cited to appear at a Probate Court, to be held at Cambridge, in said County of Middlesex, on the third day of January, A. D. 1899, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And the petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Witness, CHARLES J. McINTIRE, Esquire, Judge of said Court, this eighth day of December, in the year one thousand eight hundred and ninety-eight.

S. H. FOLSOM, Register.

Commonwealth of Massachusetts.

MIDDLESEX, ss.
PROBATE COURT.

To the heirs-at law, next of kin, creditors and all other persons interested in the estate of SUSAN C. PUSHEE, late of Somerville, in said County, deceased, intestate.

WHEREAS, a petition has been presented to said Court to grant a letter of administration on the estate of said deceased to Frank S. Pushee of Somerville, in the County of Middlesex, without giving a surety on his bond.

You are hereby cited to appear at a Probate Court to be held at Cambridge, in said County of Middlesex, on the third day of January, A. D. 1899, at nine o'clock in the forenoon to show cause, if any you have, why the same should not be granted.

And the petitioner is hereby directed to give public notice thereof by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Witness, CHARLES J. McINTIRE, Esquire, Judge of said Court, this ninth day of December in the year one thousand eight hundred and ninety-eight.

S H FOLSOM, Register.

Commonwealth of Massachusetts.

MIDDLESEX, ss.
PROBATE COURT.

To all persons interested in the estate of MEHITABLE FRENCH, late of Concord, State of New Hampshire, deceased, or in the personal property hereinafter described:

WHEREAS, Willis G. Buxton, appointed administrator with the will annexed of the estate of said deceased, by the Probate Court for the County of Merrimack, in the State of New Hampshire, has presented to said Court his petition, representing that as such administrator he is entitled to certain personal property situated in said County of Middlesex, to wit: Amount of deposits with accrued dividends under bank book No. 9908 in the Arlington Five Cents Savings Bank, located in Arlington, in said County of Middlesex, and praying that he may be licensed to receive or to sell by public or private sale on such terms and to such persons as he shall think fit,—or otherwise to dispose of, and to transfer and convey said estate.

You are hereby cited to appear at a Probate Court, to be held at Cambridge, in said County of Middlesex, on the tenth day of January, A. D. 1899, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is ordered to serve this citation by publishing the same once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Witness CHARLES J. McINTIRE, Esquire, Judge of said Court, this twentieth day of December, in the year one thousand eight hundred and ninety-eight.

S. H. FOLSOM, Register.

OUR HOMES.

The Workbox.

A KNITTED SILK PURSE.

Use Heminway's crochet silk and four steel needles about No. 18, if a tight knitter, No. 19 if a loose knitter.

Cast 30 stitches on each of three needles. In the fifth, sixth, seventh and eighth rows, we borrow one stitch from the next needle, at the last end of needle each time.

1st round—One plain, seam 1, alternately.

2d round—Narrow, over twice, narrow; repeat around, knitting last 2 plain.

3d round—Two plain, purl 1, (*) 3 plain, purl 1; repeat from (*) around.

4th round—All purled. Arrange stitches to have 30 on each needle.

Now begin pattern.

1st round—(*) One plain, over, 3 plain, narrow; repeat from (*) around, borrowing 1.

2d round—(*) Two plain, over, 2 plain, narrow, repeat from (*) around.

3d round—(*) Three plain, over, 1 plain, narrow, repeat from (*) around.

4th round—(*) Four plain, over, narrow, repeat from (*) around.

5th round—Four plain, over, 1 plain, (*) slip and bind, (*) 3 plain, over, 1 plain, slip and bind, repeat from (*) around, borrowing one stitch at end of each needle as stated above.

6th round—3 plain, over, 2 plain, slip and bind, (*) 2 plain, over, 2 plain, slip and bind, repeat from (*) around, borrow 1 stitch, etc.

7th round—2 plain, over, 3 plain, slip and bind, (*) 1 plain, over, 3 plain, slip and bind, repeat around from (*), borrow 1 stitch, etc.

8th round—1 plain, over, 4 plain, slip and bind, (*) over, 4 plain, slip and bind, repeat from (*) around, borrowing 1 stitch, etc. Repeat the pattern for length required 6 times in the one given. Knit 1 plain round.

To decrease change the stitches some, but always keep the over, narrow, directly above those in last open round.

1st round—(*) Two plain, over, narrow narrow; repeat around from (*).

2d and 3d rounds—Plain.

4th round—Two plain, (*) over, narrow, 3 plain; repeat from (*), knitting 1 on last end

5th and 6th rounds—Plain.

7th round—Two plain, (*) over, narrow narrow, 1 plain; repeat from (*).

8th and 9th rounds—Plain.

10th round—One plain, (*) over, narrow, 2 plain; repeat from (*).

11 and 12th rounds—Plain.

13th round—One plain (*) over, narrow, narrow; repeat from (*).

14th and 15th rounds.—Plain.

16th round—(*) over, narrow. 1 plain; repeat from (*).

17th and 18th rounds—Plain.

19th round—(*) Over, knit 3 together, repeat from (*)

20th and 21st rounds—Plain.

22d round—(*) Over, narrow, repeat from (*).

23d and 24th rounds—Plain.

25th round—(*) Two plain, narrow, repeat from (*).

26th round—Plain.

27th round—Like 25th round, except the 1 plain between last 2 narrowings.

28th round—Narrow all round, knit last stitch plain. Fasten off.

Finish to sew on top.

Cast on eight stitches.

1st round—Slip 1, 1 plain, over twice, seam 2 together, over, seam 2 together, over, seam 2 together.

2d row—Over twice, seam 2 together, (over, seam 2 together) twice, 2 plain; repeat till long enough. Join, sew to top of bar. An extension top may be bought, and the purse sewed to it. Finish bottom of purse with a tassel.

EVA M. NILES.

"Too Tired to Sleep."

In the crisp, cool days of early winter, the bright sun and bracing air tempt us all to exercise beyond the limits marked by experience as those of health. The vigor of the system is so great that the first warning whisper of fatigue is often unheeded, and we go on until the cry of utter exhaustion compels obedience.

Physical exercise is necessary for the preservation of robust health, but its practice must be tempered by reason. In nothing is the saying that one man's food is another man's poison more strictly true. A task which is accomplished easily, pleasantly, and with actual physical benefit by a college athlete would make a delicate girl seriously ill and might kill an elderly man.

Exercise increases the combustion of the tissues, and so promotes the renovation of the body. The old, worn-out cells are destroyed, and their place is taken by new ones, which do their work so well as to admit the whole body to a share in their joyous youth.

But this result follows only when the waste matter is promptly removed. The excretory organs are capable of getting rid of only a fairly regular amount of waste matter each day, and must be trained gradually to accustom themselves to dispose of increased amounts. If the work of the muscles is suddenly increased beyond the ordinary, there will be a proportionately greater amount of waste material, which the system is unable to throw out as rapidly as it is formed. The blood becomes charged with these poisons, for such the waste products of the body are, and the result is a condition which, if prolonged, would be disease.

"Too tired to sleep" is a common experience, and this is its explanation. The imprudent cyclist, golfer or pedestrian is simply poisoned with his own leucomains, as the products of tissue combustion are called, and he must get rid of them before, he can rest well.

Fortunately this is not a difficult task for a healthy person. A turkish bath is one of the best restoratives for an overtired man, and its good effects can be obtained almost as well at home by the taking of a hot bath and the drinking—sipping—of two or three glasses of cool not iced, water. After the bath, which should end with a rapid douching or sponging with cold water and a brisk rub, a rest of half an hour should precede the taking of food.

This meal should be light, for the body has enough to do to rid itself of the poisons, and must not be burdened with the digestion of a hearty meal. Then another rest of an hour and a quiet stroll for fifteen minutes in the open air may be followed by bed. —Youth's Companion.

A New Use for the Chafing Dish.

Now that cold weather, with its candy-making possibilities, is once more upon us, the owner of a chafing dish may add a convivial feature to many an evening spent in her house if she will bring forth her chafing dish and in it compound some delicious home-made candy. The chafing dish will prove the centre of attraction and interest, and will supply the often sought for "something to do" on a winter's evening.

Very delicious and easy to prepare in a chafing dish is a certain "brew" of vanilla caramels. Put into the blazer two cupfuls of sugar, a cup of cream and two generous tablespoonfuls of butter. Stir constantly to prevent scorching, until a little of the boiling liquid will turn to a firm paste if dropped in iced water. Remove from the fire, stir in two teaspoonfuls of vanilla extract, and beat hard for several minutes before turning the mixture into buttered pans to cool. Mark off in squares. These are relished by people who like granulated or sugared caramels.

Chocolate caramels with nuts may be prepared by cooking together in the blazer a pound of brown sugar, a quarter of a pound of grated chocolate and half a cup of water. When the candy hardens in water, stir into it one tablespoonful of butter and a cup of chopped walnuts or hickory nuts. Beat hard and remove from the fire. Turn into pans and cut in squares.

If a peanut molasses candy is desired it is well to have the peanuts prepared beforehand. This is done by shelling, skinning and splitting them, and putting a layer of them in the bottom of a greased pan. Put in the chafing-dish a cup of genuine molasses, one of brown sugar, one tablespoonful of vinegar, and one of butter. Boil together until the candy is crisp when tested in cold water; add three-quarters of a teaspoonful of baking-soda, and pour the boiling candy over the peanuts. This taffy should be very cold before it is eaten, and to hasten this end the pans may be set outside in the cold air, or, better still, in the snow.

A delicious maple-sugar candy may also be made in the chafing-dish. Break into very small bits a pound of maple sugar, and stir it into a cup of cream and one of milk mixed. Turn into the blazer and boil, stirring all the time to prevent scorching, until a little hardens in cold water. Now beat into the candy as many hickorynut kernels as it will take, and then turn out to cool. This may not look so pretty as smooth candy that can be cut into neat squares, but it makes up in palatableness for what it may lack in appearance.—Harper's Bazar.

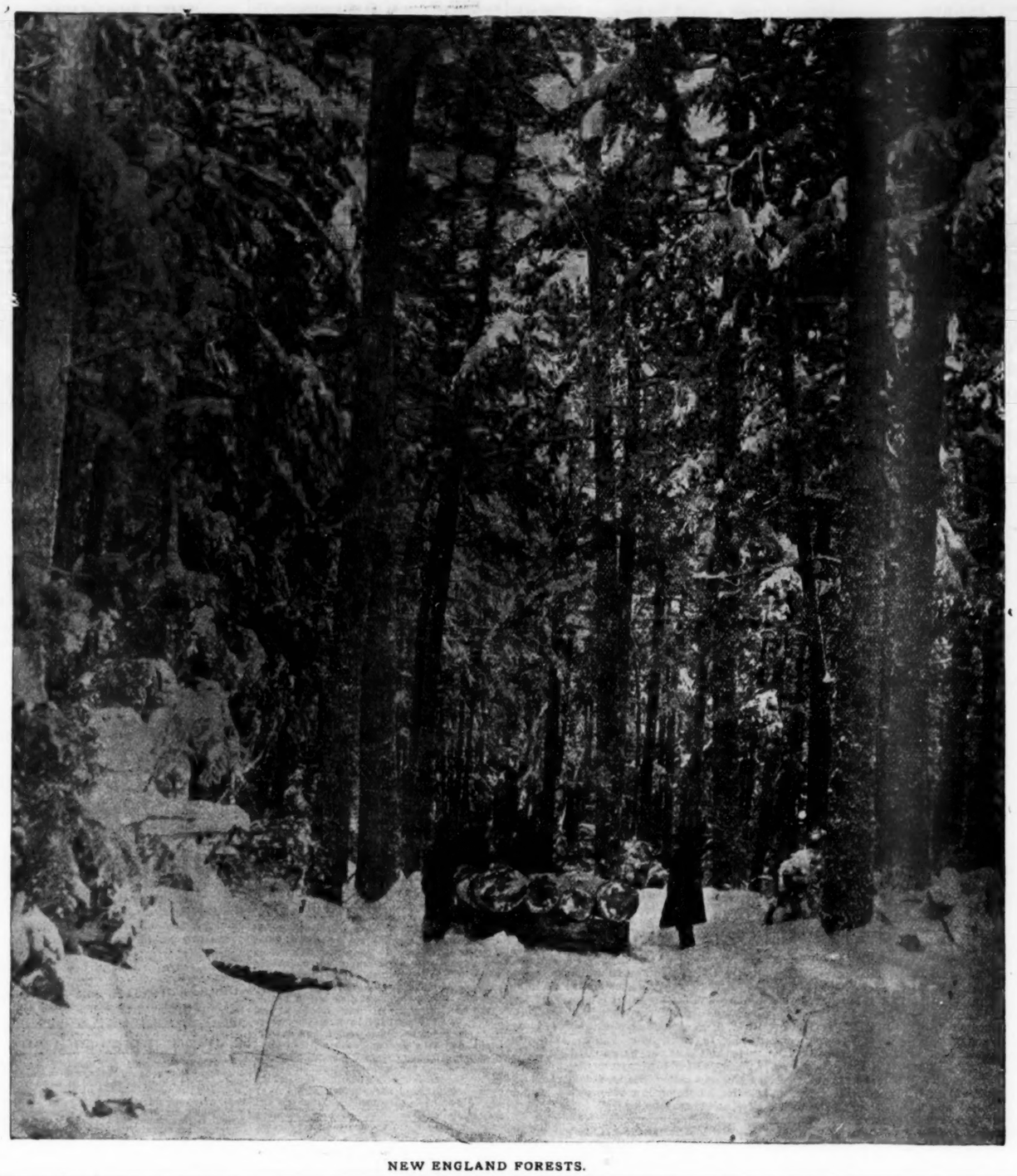
Cold Morning Bath.

The cold morning bath, like most other hygienic practices, benefits some and injures others, according to physical constitution, vigor and vitality. Says the Hospital: "Many people who have, as they would say, been 'always accustomed' to take a cold tub every morning continue the habit long after it had better been given up. They do this partly because it is a habit, and partly because they dislike the confession of getting old which seems to be involved in giving up the custom of their more youthful days. But we are quite clear that, unless good reaction very quickly follows a cold bath, and follows it without much 'toweling,' such tubbing is very often injurious. Whenever a man has to 'rub himself warm,' or when he finds that he is not right again until after his breakfast, he may feel sure that his tub is doing him harm, and that he would do better to take a warm bath, finishing off with a rapid sponge over with cold water."

Domestic Hints.

LEMON CAKE.

Beat together one scant cup of butter and three cups of sugar; add the yolks and whites of five eggs, beaten separately, and one cup of milk, three and one-half cups of flour, a scant teaspoonful of soda, the juice and rind of a lemon (the last should be put into the creamed butter and sugar before the other ingredients are stirred in). Frost with white icing flavored with lemon juice.



NEW ENGLAND FORESTS.

BOILED PIG'S FEET.

Wash thoroughly four pig's feet, cover with cold water, bring slowly to the boiling point, drain and drop in a bowl of cold water. Let stand for half an hour, put into a clean saucepan with two quarts of water, one teaspoonful of salt and one tablespoonful of vinegar; heat slowly and simmer for four hours. Transfer to a hot platter, pour over a little white sauce and serve.

SALAD DRESSING.

Put the yolks of two raw eggs, one tablespoonful of butter, a dash of cayenne and one quarter of a teaspoonful of salt in a saucepan and stand in another pan partly filled with hot water. Put over the fire and stir continously; when it begins to thicken draw to one side and add by degrees two more tablespoonfuls of butter. When the butter is entirely absorbed, and the mixture is thick and smooth, take off and strain into a bowl or glass. Just before serving stir in four tablespoonfuls of very thick whipped cream.

PLAIN SAUCE.

Beat together one cupful of sugar with the yolks of two eggs; then add the whites beaten to a stiff froth; flavor with a wineglass of wine or half of a grated nutmeg; add a small teacupful of boiling water, and stir constantly.

CRYSTALLIZED POPCORN.

Put into an iron kettle one tablespoonful of butter, three tablespoonfuls of water and one teacupful of white sugar; boil until ready to candy, then throw in three quarts of nicely popped corn, stir briskly until the candy is evenly distributed over the corn. Care should be taken not to have too hot a fire, or the corn will be scorched while crystallizing. Nuts of any kind may be treated in the same way.

RICE FOR INVALIDS.

Take a tablespoonful of rice and a pint of milk; put them in an earthern dish and bake in the oven for two hours. Keep the dish covered for the first hour, then take off the cover and stir occasionally. Sweeten if preferred. This is an excellent dish for persons recovering from bowel trouble.

Hints to Housekeepers.

In using peas, asparagus or other vegetables put up in slightly salted water drain off and throw away all the liquor. Cover the vegetables with cold water and let stand for at least half an hour; drain and heat over hot water, adding a few spoonfuls of fresh water, a bit of butter, seasoning, etc.

Why can't women find longer lead pencils? Almost universally the ones they used in crossing off their lists were about two inches long. Notice how they wet them each time? Isn't that a woman's trick?

Calf's brains, like sweetbreads, are always parboiled, after which they may be finished in any way desired. To give them a little more flavor a spoonful of vinegar, a half teaspoonful of salt, half a small bay leaf and a blade of mace should be added to the water in a saucepan, and they should be simmered for ten minutes (this liquor may be used later as a base for soup). After cooling in a bowl of water they are dried, broiled or split, dipped into beaten egg, rolled in crumbs and fried in deep fat. Prepared in this way a pretty garnish would be watercress and potato straws.

Blankets and elderdown bath robes for both children and adults are shown for the holiday season in the prettiest of colorings and effects. They are an excellent addition to the list of family gifts.

The combination of pickled oysters with omelet may be new to many, but it will be found to be decidedly appetizing. Cut into quarters with a silver knife, a dozen of them are added to one-half of a cupful of thick white sauce, also one teaspoonful of chopped parsley, and a few drops of lemon juice; a spoonful of this is dropped in the centre of a four-egg omelet before folding in the pan, and the remainder poured round the finished omelet.

Hot-water-bag covers of elderdown flannel, with ribbon strings at the opening, are one of the inexpensive but useful Christmas gifts.

Many women wear low shoes throughout the winter. Doctors say that such women are wanting in common sense. At any rate, fashionable boot dealers are trying to meet the situation with very smart leather gaiters, that fit snugly about the ankle and fasten with large buttons. Both tan and black are finding favor.

Equal parts of ammonia and turpentine will take paint out of clothing, even if it is hard and dry. Saturate the spots often as necessary, and wash out in soapsuds.

A little borax put in water in which scarlet napkins and red-bordered towels are to be washed will prevent them from fading.

A pleasant variation of the perennial oatmeal or other breakfast cereal is to serve apples with it. The fruit is pared, quartered, and sliced, and used with the cereal while it is very hot. Powdered sugar and cream are then added. The heat of the cereal removes the chill of the apples, and the fruit in its turn imparts an agreeable relish to the often monotonous breakfast mush.

Kerosene or burning fluid is excellent for cleaning windows. Moisten a woolen cloth with it, rub the glass clean, then polish with a fresh piece of flannel. This is an easy and effectual method of cleaning windows all the year round, but it is especially recommended in frosty weather.

Fresh ink stains on carpets or tablecloths can be removed by repeated applications of dry salt. Carpets are freshened and colors brightened if wiped with clean cloths wrung from salt water. Coarse salt sprinkled occasionally around the edges of carpets is a moth destroyer.—Philadelphia Record.

The Fashions.

*** The new jet and cut-steel embroideries are quaint and elaborate in design, and the work on net, velvet or satin very beautifully executed.

*** The hats that milliners consider their masterpieces are even larger than the picture hats of the summer, and their width across the front is excessive, owing to the very long feathers curving right and left above the brim, which serve to exaggerate the width of the hat itself. The bonnets and hats made wholly of fur are the newest things from Paris, but they certainly cannot be recommended from a sanitary point of view.

*** The clinging effect so much desired in skirts is augmented by lining them with silk warp cashmere instead of taffeta, as the rustle is no longer desirable.

*** Mull ties edged with lace are still worn, but ends of the lace are much longer, so that very little of the mull shows. Some of these ties have only enough mull in them to reach around the throat, and then both bow and ends are of lace. There is a white Chantilly lace which is very expensive and quite rare, and it makes very pretty ends for these ties; but there is no fixed rule as to what sort of lace shall be used—both the light and heavy kinds are correct

*** Long coats are more worn this winter than they have been before in years. The long coat can come about as near making or marring a woman's looks as any garment in her wardrobe. Unless it is of fine material, well cut and better fitted, it is about the cheapest looking of all wraps. When it has the right fit on the right figure, it is simply stunning. The long coat is a luxury and not a necessary—fortunately. In the first place it is very expensive and does not look well on those of short stature and stout build. Then, too, it has its disadvantages, for unless made of very lightweight material, in which case it is hard to acquire the desired style, it is toot heavy for comfort even on very cold days.

*** For those who do not carry muffs, gauntlets of fur are worn to match the boa or coat trimmings. This is a London fashion, which will, no doubt, materialize here later on.

*** Fancy muffs are finer than ever before The prettiest are made of a combination of marabout feathers, chiffon and flowers, orchids being more in vogue than any other blossom. Lace and fur are also used in combination, and usually a neckpiece to match is worn with the muffs. They are pretty, but a muff of mosquito netting, unlined at that, would serve just as well, so far as keeping the cold out goes.

*** Dresden effects are returning.

*** Shirring ribbons will be popular for spring.

*** Velvet ribbons in narrow widths are in wide popularity.

*** Italian red, much like the tint of the heart of a Jacque rose, is a marked favorite in the brilliant winter list of colors, and cloth gowns of this becoming shade, with sable, mink, otter, or fox-band collar, and revers by way of trimming, are considered among the smartest of the winter styles for youthful wearers. At a recent fashionable gathering at the Waldorf-Astoria, a tall, stately woman, with snowy hair arranged en Pompadour, was attired in a tailor costume of deep Italian red broadcloth, trimmed with black silk cord devices en applique and black Persian lamb. Her large Directoire hat was laden with drooping sable plumes, and one could hardly imagine a gown more strikingly becoming or appropriate.

*** Very handsome ball dresses are this season made of chenille-dotted net over satin, trimmed with very fluffy plaited ruffles of chiffon, bordered with tiny lines of chenille the color of the dot in the net. A pale blush-rose pink net dotted with black chenille is made up over deep rose satin. The low-cut bodice has little sleeves made of the chenille-edged chiffon frills, and is held at the waist by a velvet belt fastened with an oval buckle of black enamel and French brilliants.

*** Some of the popular fur toques have the rims and sides solid with fur, the soft crown in many showing so little that it is hardly noticeable. Many of them are trimmed with either one or two ostrich plumes, passing from the front to the back of the hat. They are usually of some shade of soft gray or brown, those indescribable shades, neither light nor dark, but dull in effect, and which have new names each year, which this year blend with the fur of the toque, which seldom has flowers upon it to brighten it.

*** Everything in the shape of a long chain is now called a Cyrano chain; and everything in the shape of a woman is now wearing one.

*** One of the latest novelties in millinery is colored grebe. Pretty toques are made of pale blue or pink grebe, and said to be wonderfully becoming. Toques of white caracul are another fancy.

*** Jewelled butterflies, butterfly wings of spangled gauze and half wreaths of flowers, with a rose and bud arranged in aigrette form, are the chic hair ornaments for evening, provided that the jewelled tiara is not forthcoming. Spreading tulle or lace bows in fan shape are not considered good style.

*** The jewellers have set plentiful snares for the holiday shoppers, and few are the young women who now wish to wear anything on their neck chains but a large cut crystal heart in pretty good imitation of a sapphire, amethyst, topaz, aqua marine or turquoise. Frosted gold or silver covers the top of the heart. Beside the heart pendant all up and down the chain are fastened short sections of links, to the ends of which are attached an amazing array of trinkets. They are made of gold, silver, steel, gun metal, platinum and even of brass. Few of them are larger or longer than one's thumb nail, and the favorites are crabs, muskets, a beautifully modelled little baby hand, a jointed doll, an enamelled golf ball or football, a rabbit and an oyster shell in gold and gun metal, with a pearl in the centre.

CURIOUS FACTS.

——There have been twenty-seven cases of insanity in the Bavarian royal family during the last one hundred years.

——A lion hunter who has made a study of that animal's peculiarities says that all lions are left-handed. When one strikes a forcible blow it always uses its left paw.

——In place of glass the Philippine islanders generally use plates made of the shell of a kind of oyster which admit an agreeably subdued light, and are not so easily damaged by earth quakes as glass windows are.

——The oldest and most curious herbarium in the world is in the Egyptian museum at Cairo. It consists of crowns, garlands, wreaths and bouquets of flowers, all taken from the ancient tombs of Egypt, most of the examples being in excellent condition. Nearly all the flowers have been identified. They cannot be less than three thousand years old.

——With regard to painters' ages, note should be taken that many of the old masters lived to an advanced age. For example, the following may be quoted: Michael Angelo, 89; Hals, 86; Hobbema, 81; Teniers, 80; Moralez, 80; Greuze 80; Ghirlandajo, 78; Snyderr, 78; Tiepolo, 77 Mantegna, 75; Van der Heyden, 75; Vernet, 75; Van de Velde, 74; Poussin, 72; Mabuse, 71; De Keyser, 71; Mateys, 70; Wynants, 70; Dolce, 70 There are, of course, many others, and there can be no doubt that the generality of artists are a long-lived race.

——Nearly one-fifth of the students at Swiss universities are women.

——Of the 4200 species of flowers in Europe, only about ten per cent., are known to give forth any color. The commonest flowers are white ones, of which there are 1194 kinds, and of these one-sixth are fragrant. Of the 951 kinds of yellow flowers seventy-seven are odoriferous, of the 823 red kinds eighty-four, of the 594 blue kinds thirty-one, of the 308 violet blue kinds thirteen, of the 340 kinds with combined colors twenty-eight are fragrant.

——The bureau of statistics of the Treasury Department brings out the fact that only twice in the country's history have exports reached $1,000,000,000 in 1896 and 1897. This calendar year will show exports in excess of $1,250,000,000. November exports were the largest in any month, and December is always a bigger month for exports than November. The low price of cotton has made the exports of that commodity the largest, in bales, ever known

——Experiments now show that during profound sleep a noise not sufficient to awaken the sleeper produces a perceptible rise in the temperature of the brain.

SCIENTIFIC.

——It is computed that when at rest we consume five hundred cubic inches of air a minute. If we walk at the rate of one mile an hour we use eight hundred; two miles, one thousand; three miles, 1600; four miles, 2300. If we start out and run six miles an hour we consume three thousand cubic inches of air during every minute of the time.

——The weights of classes of students before and after examination have been made the subject of recent investigation. In high classes, where naturally the responsibility of the examination to be gone through with was most felt, several pounds were lost, showing how the mental strain was felt. In lower classes the loss was not so great.

——Experiments with plant seeds subjected to extreme cold have shown that the power of germination is not destroyed, but merely suspended by the cold. By the use of liquid air, seeds of barley, oats, squash, cucumber, pease, sunflower, and some other plants were recently kept for 110 hours at a cold of 183° to 192° Centigrade. They were then carefully and slowly thawed for 50 hours. They were then planted, and sprouted as well as if they had not been frozen.

.....A crank is he who'll not agree
With us in our pretence.
The man who'll praise our silly ways
We deem a man of sense.

.....Then let us take the heathen in
And Christianize and tax him;
And if he kick, fill full his skin
With bullets a la Maxim.
—Cincinnati Enquirer.

.....Man was sentenced to earn
His bread by the sweat of his brow,
But the man who does it is looked upon
As small potatoes now.
—Chicago News.

.....The girl who keeps her birthday
When a merry little elf,
Keeps it still when she grows up,
But keeps it to herself.
—Chicago Record.

.....In weight and vast circumference
The man resembled Grover;
The girl was just a tiny thing,
And yet she "threw him over."
—Exchange.

.....The daughter of an editor was she;
And when he kissed her (through Love's impish pranks),
Quite absent-mindedly she said to him,
"Your contribution is returned with thanks!"
—Puck.

.....A brown little Cuban named Hannah,
Partook of a large, green banana—
Wher, to get her, dark death
Came, her very last breath
Employed she to mutter, "Manana!"
—Detroit Journal.

.....Though horrid war of late has laid
Its cruel trail across the land,
The good old barnyard turkey's stayed
In business at the same old stand.
—Chicago News.

.....Old Rip Van Winkle was quite wise;
He didn't curse or rail,
But slept while waiting for his wife
Outside the bargain sale.
—New York Journal.

POETRY.

(Original.)

CHRISTMAS DAY.

Dear happy day, when earth is filled with joy;
When mistletoe and laurel grace the walls
Of home and church and merchant's dingy stalls;
When man, the dignified, becomes the boy,
Renews love's youth, that years will not destroy;
And all his first ideal dreams recalls
That still remain within his memory's halls;

Though dimmed by stern reality's alloy!
Dear happy day, of the reunions cheer;
When sordid hearts are melted for a time,
How dost thou crown with joy the waning year!
How blithely sound the rhythmic church-bells chime!
Where is the lonesome life so sad and drear,
That knoweth not Christ's spirit-gifts sublime?

ARTHUR E. LOCKE.

IN THE GOOD OLD DAYS.

In the good old days, in the spacious days, when the Christmas Feast began,
There was good clean air between house and house, good faith between man and man;
To the lonely houses the men came home, and the doors were strong and stout
To shut a man and his friend folk in, and to shut the foeman out.

. . . .

Now the snow is trampled by million feet; the world is lighted and loud,
And Christmas comes to a hurried host of neighborless men in a crowd;
And round are the mince pies sold in the shops, and the holly and yew tree bough,
And the beef and the beer and the Christmas cheer are brought by the tradesfolk now.

The wind no more between house and house blows free, and freezing, and sweet:
The houses are numbered all in a row, and squeezed in a narrow street;
We know not the breed of our Christmas beef, nor the brew of our Christmas beer,
Yet we sit round a table and call our toast—though it come but once a year.

—E. Nesbitt, in the Pall Mall Magazine.

SONNET.

There's that more precious than the diamond's flame,
And beautiful as is the ruby's glow,
Or bloom of pearls; which gold indeed may maim,
And yet not easily again bestow;
Which giveth beauty grace, like scent to flowers;
Without which beauty is a rootless bloom;
Which raiseth bright-dressed thoughts, like vernal showers
The beaded grass, and gildeth sorrow's gloom.
It makes a beggar happy as a king;
A king who wants it is a fettered slave!
'Tis manhood's very sceptre; it may bring
Hope to the hero, courage to the brave!—
"Come, tell us, pray, what is this priceless wealth?"
What we are spendthrifts with, my friends—our health!

—G. G. Somerville, in Chambers's Journal.

THE VIRGIN'S HYMN.

Oh, sleep and rest; oh, sleep and rest,
Thou Blessed Babe upon my breast,
For softly fades the evening light;
Soon it is night; soon it is night.

Sleep on, sleep on, Thou Babe Divine,
Held warm against this breast of mine;
So soft and small, so soft and small,
To be the very Lord of all.

Oh, little, little tender hands,
Must you be pierced and bound with bands?
Oh, little feet against my arm,
Must you go forth to suffer harm?

But sleep and rest; oh, sleep and rest,
Thou Holy Thing upon my breast;
The sword that pierces heart of Thine,
My Little Babe, must pass through mine.

Sleep on; sleep on, tho' shadows fall,
Sleep on, Thou King and Lord of all.
Oh, sleep! Thy Mary shall not fear
While Thou art near; while Thou art near.

—Katharine Pyle, in Harper's Bazar.

A DREAM.

"Horseman, springing from the dark,
Horseman, flying wild and free,
Tell me what shall be thy road,
Whither speedest far from me?"

"From the dark into the light,
From the small unto the great,
From the valleys dark I ride
O'er the hills to conquer fate!"

"Take me with thee, horseman mine!
Let me madly ride with thee!"
As he turned I met his eyes,
My own soul looked back at me!

—Lilla Cabot Perry.

VIXI.

I have lived and I have loved;
I have waked and I have slept;
I have sung and I have danced;
I have smiled and I have wept;
I have won and wasted treasure;
I have had my fill of pleasure;
And all these things were weariness,
And some of them were dreariness.
And all of these things—but two things

GREETING.

Many years have sped
Since first I saw your orange covers;
And with them youth and strength have fled,
Old friends are gone, and youthful lovers.

But, even as in days gone by
You came to bless my scanty leisure,
Still in your pages I descry
A welling fount of quiet pleasure.

Go on, old Friend; and as of yore
You bid us company with sages,
Walk with them still, as heretofore,
And may no evil mar your pages.

And when Death's deep forgetfulness
Has closed for me all earthly pleasure,
May Chambers still remain to bless—
Those who come after—in full measure.

—M. L. S., in Chambers's Journal.

In peace, Love tunes the shepherd's reed,
In war he mounts the warrior's steed,
In halls, in gay attire is seen,
Love rules the court, the camp, the grove,
And men below, and saints above,
For love is heaven, and heaven is love.

—Sir Walter Scott.

In peace there's nothing so becomes a man,
As modest stillness and humility,
But when the blast of war blows in our ears,
Then imitate the action of the tiger.

—Shakespeare.

In the Heavens above,
The angels, whispering to one another,
Can find among their burning terms of love
None so devotional as that of "mother."

—E. A. Poe.

Lead, kindly light, amid the encircling gloom.
Lead Thou me on!
The night is dark, and I am far from home—
Lead Thou me on! —J. H. Newman.

I've borne so much already,
A little flow'ret moans;
So oft rough hands have pelted
My head with sand and stones!
Oft, too, have footsteps heavy
Caused me such anguish keen,
It seemed for long, long hours,
Destroyed my life had been.
But when, your way pursuing,
You calmly passed me by,
All pain that I have suffered,
The pangs you dealt entire.

—Johanna Ambrosius.

Of all the horrid, hideous notes of woe,
Sadder than owl-songs on the midnight blast,
Is that portentous phrase, "I told you so."

—Byron.

....Through leafy groves they rode. Soft breezes fanned 'em.
He fairly ached to kiss her—on that tandem—
But dared not run the risk of a rebuff.
His courage wasn't geared up high enough.

—Chicago Tribune.

Condy's Courtin'.

Condy was a plodding, practical man. And Condy was a bachelor. Off and on for twenty years before, neighbors who had an interest in him—and neighbors who had an interest in their own daughters—had been advising Condy to take a wife unto him. "Musha, Condy Sheeran, what's goin' to happen to ye, at all, at all—livin' there in that wee cabin yer lee-alone, with divil a sowl to look afther ye, or care for ye? Why, but ye rouse yerself up, man alive! an' look out for a sthrappin' young woman that 'ill put yer house to rights—an' yerself, too; an' make a new man o' ye. There ye're doiterin' an doiterin', in of the house, an' out of the house, an' about the house, an' delvin' an' diggin' early and late, summer an' winther, on yer wee farm, an' where yer comfort comes in is more nor I know. Yer house is in an uproar (disordered state) lak the fair of Carmen; an' wan would think the clothes on yer back was thrown at yer. Ye're scratchin' and scrapin', layin' by money for the sorra-only-knows-who to scatther. Rouse yerself, man alive! There's girls on all sides of ye that the cheeks of them would be betther nor a fire in yer kitchen, an' they'd jump at the offer of bein' Missis Sheeran, if ye only sent them the word be a fiddler."

Condy, inwardly amused, ever patiently listened to the kind advice his good neighbors were so generous in bestowing on him. But his poor mother (God be merciful to her!) ere she died left Condy a legacy of proverbs that for years had given him pause. "Never you buy a pig in a poke, Condy ahaisge," his mother used to say, far from intending any disrespect to the young ladies of Dhrimholme; "an' there's many a dashin' girl makes a poor dhraggle-tailed woman." "Betther alone than in bad company, Condy," she would also say. And—a variation of this last—"A lonely hearth an' paice is betther nor the best woman in the wurrl' an' verrins" (variance).

Still, the more experience Condy had of the lonely hearth and peace, the more frequently would the question force itself on him: "But if I had a middlin' good woman an' no verrins?" And as he and the cat sat by the hearth on a long winter's night, looking into each other's eyes, Condy, with the limited amount of imagination at his command, used often to picture a homely sensible woman crooning a song round the house as she busied herself doing the timirushes (little necessary household matters), while he, with well-washed and well-patched clothes, lay back in his chair in the corner, and, watching her, puffed his little black pipe in cheerful contentment. And at length, when, after mature deliberation, he considered he had reached years of discretion,—he was then forty-five, having been born June was three years after the dear summer,—he decided he might venture to trust his judgment in selecting one fitted to be a wife to his mother's son.

So, on a night when he had a fine junt of fir blazing in the fire, and the cat blinking and purring at him across the hearth, and his black pipe working spasmodically and not uncomplainingly, Condy went painstakingly through the catalogue of eligible females in the parish. He first weeded out those that were too young,—"A slip of a girl undher thirty doesn't know her own mind," he said; "so I'll have nothing to say to wan o' them." Then he rejected the crotchety, cranky ones, and all who were reputed possessors of any sort of ill temper, and next the slatternly ones. "Me sawnies," Condy said to himself, "the list's gettin' mortial small," and so it was. And when, finally, he had also put aside all who were "too fond o' the sight of the black pandy (porringer) on the coals"—which was to say all who were too fond of tea,—just one woman remained. She was Ellen McGroarty of Throwerstown. Ellen was a daughter of Long Neil, and she had been the heiress of the McGroarty property, consisting of two acres of clay land and two miles of bog and heather,—an extensive, if not very remunerative estate; besides pigs, cows, ducks, drakes and other farm stock. Regarding Ellen's age, it need only be said that she, like Condy, had reached years of discretion.

Having settled one difficulty, another loomed upon Condy's horizon, and required another night's grave deliberation—How was he to ask the wife?

"Of course," and Condy seemed to direct his discourse to to the cat "I'm not used to this sort of business, niver bein' in the habit of axin' weemen." Condy didn't intend to be satirical at the cost of the young men of Dhrimholme, but unconsciously he was. "An' I wish I had it well over me."

The etiquette of marriage proposals as observed in Dhrimholme was a mystery to Condy, who had never gone on such an expedition. If there had been an intended father in law in the case Condy would have seen his way pretty clear,—even a mother in law might have been negotiated. But Ellen was, again like himself, lee-alone. Of course, Condy had heard over and over again the ridiculous way they settle those matters in the tale books,—two blessed idiots squeezing the breath out of one another, one gasping, "Say, beloved star of my existence, will you be mine forever?" and the other fool replying, "Ye-ye-yes—yes, for ever and ever!" But he didn't give this silly method a moment's thought. He also saw that he might lift the latch and walk in to Ellen with "God save all here; an' I want to know will ye take me, Ellen?" But little thought he gave that method. How he should do it was more than he knew; and he had half begun to consider whether, after all, the advantages of having the best girl in the parish, with two acres of clay land and two miles of moor land, geese, pigs and other farm stock to boot, would really outweigh the ment l endeavor the asking of a wife would entail.

One thing, however, Condy did know, and that was, when any one went looking for a wife, a bottle of whiskey was an indispensable factor. So, with a prayer in his heart and a bottle of whiskey in his pocket, Condy, on a beautiful moonlight night, stepped over the moor to Ellen's. Ellen was carding wool, in preparation for spinning, as Condy, lifting the latch, thrust his head in at the door.

"God save ye, an' God bless the work!" he said.

"Save yerself kindly, an' thanky, Misther Sheeran," Ellen, a little surprised said. She laid down the cards, and drawing forward a chair, wiped it with her apron and set it in front of the fire. "Come forrid, Misther Sheeran an' take a glint o' the fire. Iilloga, a thin, sharp night it is. My fire might be better, too, but, musha! it was a poor saison for thurf."

"Oh, thanky, thanky, Ellen," Condy said, settling for himself a seat right at the door, as if he anticipated having to make a clean run for it, and chose the readiest position. "I'll just do here."

"Arrah, bather! come up with yerself when I tell ye. Musha! but ye're warm on it It would be enough a day the crows would be puttin' out their tongues to go an' sit by that door,—it's about as sheithery as an iron gate. Come up with yerself when I tell ye!"

And as Condy took the proffered seat, Ellen's keen eye detected the neck of the bottle sticking out of Condy's pocket, and instantly a little light dawned on her.

So, as soon as she had put more turf and fir on the fire and tidied up the hearth, she seated herself and began carding again very industriously, all the time running over the litany of woes attendant upon looking after a farm and farm laborers and cattle and ducks and hens and pigs, —to all which Condy listened very attentively and spoke not.

When Ellen had exhausted the topic, having advertised her dowry to her content, she made a politic pause. But Condy remained silent likewise. She ventured after a minute or two to steal a glance at him. He was putting his hand irresolutely into the pocket whence the bottle showed and nervously drawing it back again. Ellen coughed; which startled Condy.

"Have ye—have ye—a—a egg cup in the house?" he jerked out.

"A egg cup? Yis, surely, Mister Sheeran"—with well-assumed surprise and implying a politeness that forbade her to question her guest. "Surely, Misther Sheeran, I've a egg cup," she repeated as she fished for one behind the plates on the dresser.

"I've—I've a small dhrop of nice whiskey here," Condy said, drawing forth the bottle, 'an' I thought ye mightn't object to helpin' me with just a thimbleful."

"Well I thanky, an' long life to ye, Misther Sheeran; I can't have the bad manners to refuse ye—but let it be only a thimbleful. Och, that'll do, Misther Sheeran! Aisy, aisy! Faith, I'm afeared it's the tailyer's thimble—ha! ha!—that ye measure with. No, no! taste it yerself first. Och, the sorra a dhrap of it crosses me lips the night till ye drink the crivan (overflow) off it yerself. No, no, no; it's no use—I'll not br'ak me word. Taste it yerself first, Misther Sheeran, an' laive me the dawniest little dhrop in the bottom."

Condy was sitting half-turned from the fire holding the flowing egg-cup toward her, and Ellen stood facing him in a protesting attitude.

"I tell ye there's nothin' in it," he said. "It wouldn't dhrownd a bum-clock. Musha! woman, but ye're conthrairy! Take it, I tell ye, an' throw it over; all's in it wouldn't br'ak a pledge."

"An' I tell ye I won't, till ye dhrink at laist the two parts out of it. I'd be dhrunk if I took it, Condy Sheeran."

"Dhrunk, moryah! There isn't as much in it as would wet yer thrapple. Well, here goes," he said, giving up the argument in despair—"here goes, an' God bless us!"

"Amain!" Ellen fervently responded, "an God bless us again."

"Ah, ye haven't taken as much out of it," Ellen said, as she took the egg-cup from Condy, who, with the sleeve of his coat was wiping his mouth and smacking his lips with satisfaction; "ye haven't taken as much out of it as I'd lift with three pins. Anyhow—" here she made a wry face at it—"Here's luck an' prosperity to ye, Misther Sheeran, an' again God bless us."

"Luck where it goes! Amain! an' thanky kindly," Condy said.

Ellen just tasted it, made another wry face; tasted it again, and coughed distressfully; finally gulped a sup of it, and, with a suggestion of agony expressed in the lines of her face, laid the egg-cup on the table.

"Take it all, I tell ye! Finish it."

"I can't, I tell ye! Agh, agh!"

"I tell ye, ye must finish it."

"An' I—agh, agh!—tell ye I won't. Now take a sup yerself."

"Och, niver a drop till you throw off that eyeful there in the cup."

"Ye're aggeravatin'! I tell ye I can't. Show me that bottle!" And taking bottle and egg cup in her hands, she poured out for Condy a cupful with a crivan truly on it. "Now, dhrink that over."

"Well, it's you that's aggeravatin' now, woman," Condy said, as he carefully caught from her hand the overflowing cup. "Is it to dhrink that?" and he took the measure of it with a side squint.

"Ay, that—an' another if you say much. Toss it over, an' be quick about it."

"Och, then, aisy with ye, an' give me time—here's 'May the divil niver see wan of us!'"

"Amain! amain!"

In a twinkling the egg cup was empty.

Condy coughed as he handed it back to Ellen, and corking the bottle, he, according to custom, placed it on the dresser, thus resigning his ownership in the remainder.

Ellen again resumed her work, and Condy turned and gazed intently in the fire. She knew she had rid him of much of the distressing nervousness which troubled him before, and was now content to await developments.

"Musha! it's a cowl' night, Ellen," Condy said, as he spread his hands toward the blaze and shrugged his shoulders.

"Cowl' indeed," Ellen said.

"But a snug, warm little house ye have," carrying his eye round it.

"Yis, thanks be to God, warm enough, an' snug enough, but—but—"

"But what?"

"Och, just"—with a thoughtful sigh—"I mane to say, it's a bit—don't ye know? lonesome"

Condy was at once convinced he was dealing with a woman who knew her business.

"Lonesome?" said he, "throth, I don't doubt ye. I have the same feel meself."

"Now, see that!" Ellen said, looking up at him with sympathy. "I'm jist sure ye feel lonesome in that barrack of a house, all to yerself."

"Divilish much so."

For a minute or two both remained in thought.

"I often think to meself," Ellen then said, "that it isn't right to be alone."

"Many's the time San Duncan, the great scripturian, tells me the same words out of the Bible."

"An' the Bible's right. For a man in purtikler, I don't know how he can live alone an' keep his temper, for all about him's going wrong."

"You're right there. But no more can a woman, especially if she has a farm an' stock to look after; it's enough to br'ak any woman's heart."

"Do ye know, Misther Sheeran, ye have the makin's of a snug, warm little place of it there. An' it was only the other night—whetsomiver put ye intil me head—I was jist thinkin' of ye,—thinkin' how comfortable an' happy ye'd be if ye had some sort of a woman body to look aither ye."

"It's often," Condy said, slowly shaking his head at the fire—"it's often I've thought the iden tical same thought meself."

"Somewan of womankind," Ellen went on—"an aunt or frien' who'd take a kindly intherest in ye, an' tidy up yer house an' yerself,"—here Ellen glanced at Condy's dilapidated garments; Condy also glanced down at them and sighed,—"an make things look like a home it would be a pleasure to come intil."

"Right ye are, in throth," and Condy shook his head emphatically at the fir blaze.

"We'll say it's a day coming on the winther, now," Ellen in poetizing strain went on, "an' ye have been out the leelong day up to the knees in mud an' slush on the pratie ridge an' in the pratie sheugh, an' ye're comin' in dhirthy an' cowl' an' miserable an' benumbed, an' the heat burstin' from the doore as ye open it cheers the bones o' ye. There's a roarin' fine fire leapin' on the h'arth, an' over it hangs a pot of spuds laughin' through their jackets at ye as ye come in. An' the h'arth's nate an' tidy, an' the house shinin' like a new pin; an' there's a clane-wiped chair in the corner, an' yer pipe an' tibbacky in the h'arth hole right beside. An' the cat curled up wan side the fire, an' the dog in the other, an' a woman—yer aunt or cousin'—slitherin' roun' the house doin' this turn an that wan an' the other, and fillin' the wee kettle to have it boiled and singin' on the fire, callin' on the grain o' tay for it to wet as soon as you've filled the farlands with nice mealy spuds. Condy Sheeran, I say again"—with the tone of one anticipating, but defying contradiction—"I say again, it would be a comfort an' a delight to ye to have some clane, smart, and industhrious woman body about the house that would have yer happiness at heart; an' I say it would cheer the heart in ye many a day ye otherwise bring a cowl' heart intil a cowl' an' miserable kitchen."

Every point and every shade of the picture Ellen called up Condy saw vividly in the blaze; and for a minute, with the delights of it, he was too overcome to express himself.

"Thrue—thrue—thrue," he at length said slowly and convincedly; "its every word thrue as gospel, Ellen McGroarty."

"A cousin, or an aunt, or a frien', then, ye should have," Ellen said as she teased the wool with vigor.

"But that's just what I can't have. Barrin' me Aunt Mary that's married on Seumain Throwers of the Long Alt—and she can't come—I haven't a frien' in the wurrl, barrin' in Amiriky again; an' them that goes till Amiriky," Condy went on thoughtfully, "'ll not in a hurry to come back till Irelan' an' hardships for nothin' betther nor to keep house for a poor, good-for-nothin' devil of a lonesome bachelor lake me."

Ellen, politically ignoring his plea of no friends, went on: "There's fifty things about a house a man can't do an' won't do."

"Can't do and won't do—exactly."

"An' the house, sooner or later, goes to rack an' ruin; and he may then thank God if he doesn't go to rack himself."

"Thank God he may; it's gospel thruth, Ellen McGroarty. But, as I sayed, I have neither aunt nor frien' of womankin'."

Ellen affected not to perceive the bait, and went off on a new tack, where it would be Condy's duty now to follow. "For a woman's part, now, it is a different matther," she said. "There's meself, now, an' I'm livin' alone goin' on four years (it'll be four years again' Oul' New Year's Eve, the eleventh January, since me poor father—rest his soul!—died)—goin' on four years, an' I find I can manage bravely."

Condy gulped. In a minute, with an almost pitiful appeal in his tones, he said, "Ah, but, now, it's not the thing for a woman either, no more nor a man"

"Well, no, no, I suppose it's not altogether the thing," she said, conceding a strong point.

"No; it's no more right for a woman to be alone than for a man," Condy said feeling ground again.

"Well, I suppose, Misther Sheeran, when wan looks at it in that light"—what light Ellen meant wasn't exactly clear, for Condy did not seem to throw any dazzlingly new light on the subject by the particular brilliancy of his argument—"when wan looks on it in that light, sar inly I suppose it isn't."

"Sartinly it isn't," Condy said with confidence, "it's mortial lonesome."

"Ay, lonesome it is"; and Ellen shook her head at the wool she carded.

"An' there's fifty things about a farm a woman can't do an' won't do," Condy said, with ill suppressed triumph, turning her own argument upon her.

"Well, yes," as one who was forced to acknowledge defeat.

"And a man's a mighty handy article to have knockin' aroun' a house," said Condy.

"Yis, a man is; I give in to that."

"Ye don't know wher, or for what ye need him."

"Thrue for ye enough, Misther Sheeran."

"An' a woman's farm an' stock isn't cared for, or fed, or half looked a'ther—can't be—where there isn't a runt of a man."

"Indeed, an' there's no lie in that," Ellen acknowledged, with the tone of one on whom light was dawning.

"Then, Misther Sheeran," she resumed, laughingly looking up at him, "I suppose we ll have to give in; wan of us is as bad off as the other?"

"That's just it," Condy said. "But"—after a slight pause—"it needn't be so."

"Well," Ellen said, with clever stupidity, "I have sartintly been thinkin' of hirin' a thorough good man—thinkin' of it for months back. A hired man is just the very thing I need."

"A hired man," Condy said, slightly losing heart again, "isn't afther all the thing."

"Well, sartintly, Misther Sheeran, when wan looks on it in that light"—for the mysterious light once more opportunely manifested itself to Ellen—"a hired man isn't the thing either. Still, I'm thinkin', Mr. Sheeran, I'd recommend you sthrongly to hire some good, steady, middlin'-oul' woman; that's what yer want when ye haven't any frien' of yer own to keep house for ye."

"No, I'll not hire a woman. The fact is,"—and he looked steadily at Ellen, who had her head bent unnecessarily low over her work—"I am in notions of marryin', if I could soot meself in a good woman, an' that she was willin'."

"Oh, now! Faith, an', Misther Sheeran, I think ye could soot yerself aisily in the parish. There's many a fine bouncin' girl would be happy to become Missis Sheeran if they only got the chance."

"I want no bouncin' girls; I want a steady, respectable, sensible, daicent young woman, an' I'll have no other."

"Well, I can't say but you're right enough there—if there's such to be foun' in the parish."

"There is such, then."

"Oh! Then, I'm sure, if ye find such a young woman, an' that she has sense, she'll think twiset, Mister Sheeran, afore she gives ye 'No'."

"Thanky—thanky! An' I think, if I'm not takin' a liberty, that what you want is to marry a steady, sensible man, that'll take care of ye, an' of yer little farm an' belongin's."

"Ha! ha! ha!" Ellen said, tossing her head and blushing. "If ye say it in fun atself, Misther Sheeran, the same idea run in an' out o' me own head more nor wanst lately. But Misther Sheeran"—here Ellen bent her head over the work again—"sensible, good men's scarce an' hard to be got these times."

"An' Ellen, a chara, do ye think there's none such in the parish?"

"Och, indeed, there might be plenty; but I know very few such—barrin' yerself, Misther Sheeran."

And a fortnight later Ellen was the wife of the one sensible man whom she knew in the parish. —Chambers's Journal.

YOUTHS' DEPARTMENT.

THE CATS.

[Dedicated to the Coming Show.]

Hear the purring of the cats—
Stately cats!
What a gorgeous aggregation of Maltese aristocrats!
How they purr-r-r-r-r-r-r-r-r-r-r-r-r
In their ornamental cages,
As you softly stroke their fur
Like a practised flatterer,
And inquire about their ages—
Keeping time, time, time,
In a sort of feline rhyme,
To the purring from these pampered pets that pine on Persian mats—
From the cats, cats, cats, cats,
Cats, cats, cats—!
To the pur-r-r-r-r-r-r-ring of the cats!

Hear the howling of the cats—
Yowling cats!
What a wealth of rage and longing lingers in their sharps and flats!
In the startled air of night
How they scratch and screech and fight
How their fiery eyeballs glare!
How they bawl
How they hiss, and growl and swear,
And hold their swelling tails in air.
And caterwaul!
Oh, from the surrounding flats
What a gush of blasphemy, washbowls, old shoes, old hats,
And bed slats,
And brickbats
These cats have dodged! See the cats,
That smirk and simper to your pats!
Are they good for catching and dispatching
Any rats, rats, rats?
Or, rats! rats! rats! rats!
Rats! rats! rats!
What's their record when it comes to catching rats?

—Chicago Tribune.

A Brand-New Christmas.

The Barnes children couldn't have any Christmas tree this year. They live in the country, and there were trees enough, to be sure. But there was nothing to put on one to make it look "sparkly," as a tree ought to look, and there was not a penny to spend for tree trimmings.

The Barnes children, however, had a jollier time than they ever had with a tree. Joe said so, and George said so, too; and Grace and Winnie agreed with them. This is how it was done. A delightful young auntie lives with them. They call her the Lady with a Bright Idea. She always has a new bright idea just in the nick of time, but this year it did seem as if the idea was brighter than ever. It fairly shone!

"We'll give the presents in a funny way," she said to the children. "Yes, we'll give them in two or three funny ways. You'll see!"

There was a very mysterious feeling in the air Christmas morning. Everybody looked at everybody else, and then they all smiled. Something good was going to happen. When the breakfast plates were lifted, there were little envelopes tied with gay ribbons. Such a time as the children had untying them! In each was a card, and on each card was a verse, signed, "The Christmas Postman."

Joe shouted as he read his aloud:

When you get this, dear Joe,
You must straight away go
And look under your bed,
But pray don't bump your head!

Joe jumped up, but aunt'e called, "Here, you must wait until the rest have read their notes and all start at once."

The verses were all short. George read his next:

Look behind your closet door
For a great big package on the floor.

Grace's read:

In the northeast chamber, out of sight,
Under the coverlet, snowy white,
You'll find a gift if you search just right.

Last came Winnie's:

A present lies on the garret stair;
I think that Santa Claus dropped it there.

Then off the children ran to search for their presents. Such a stamping and scuffling and shouting as the grown people heard! Pretty soon they came rushing in, one after the other. Then such an untying of strings and tearing off of wrapping-papers as there was!

"Auntie! Auntie!" they shouted. "These are your presents! You are the Christmas postman!"

Auntie's gifts were not to be mistaken. She made them nearly always.

Joe's was an envelope album for scraps. Joe liked to cut all sorts of thing out of newspapers and magazines. The scrap album was made of twenty-six big brown envelopes, tied together by cords, in a pasteboard cover. They could be taken out when filled, and new ones put in.

George's "great big package" was a wooden box made into a nice little store. It had shelves and counters, and a set of scales besides.

Grace's gift was a fancy workbag, with pockets holding embroidery silks. It had some crochet needles and a pair of embroidery hoops, and some pretty doilies ready to begin work on.

Winnie's gift was an afghan, pillow and strap for her doll carriage. The afghan was made out of pink and white worsted, knitted in stripes. The pillow was of pink silk, over which was a cover of Swiss with a lace ruffle. The strap was a piece of white ribbon, with little pink flowers painted on it.

As the children were exclaiming over these gifts, they were startled by a loud noise at the door that led into the dining room from the hall, Bang! Bang! The boys ran to open the door. There stood their father. He had slipped away while they were upstairs, and they had not missed him. He had a trunk, covered with cotton and trimmed with evergreen, on his shoulder.

"Express from Santa Claus!" he cried.

"Ho, ho! Express from Santa Claus!" the children shouted, dancing around the room.

It was a regular Christmas trunk, when opened 'Merry Christmas!' was printed in green letters on a white ground inside the lid, and everything in the trunk was done up in white paper tied with green cord. In each was stuck a sprig of evergreen. In the trunk were all the presents from papa and mamma to the children, and from the three grown-up folks to each other. Most of the gifts were home made, and not costly, but all were received with delight. There never was such a jolly Christmas trunk!

"Why, we haven't given our presents to each other!" cried Winnie, at last. Each of the four children always had some trifling gift for the other three.

"I'll tell you a nice way to give them!" exclaimed auntie. "All mark your presents with the first names of those they are for, and bring them to me. Then we'll go to the sitting room, and play 'hunt the thimble' with each bundle. The one whose name is on it must go out while we hide it. And off they trooped to collect their bundles and to spend a merry morning hunting for them.—Youth's Companion.

NOTES AND QUERIES.

THE MOST DECORATED MAN—"R. W. E.": M. Faure must already possess a great many more stars and ribbons than could be displayed on any bosom, however capacious, but he is a long way from being the most decorated man in Europe. That proud distinction belongs to Count von Eulenburg, the master of the kaiser's household, who holds the record with sixty-three such vanities. He thus beats Bismarck, who could boast of fifty-four only, and Moltke, who fell ten below that total. But it must be remembered that these heroes declined many offers and refused to pay the customary fees.

HOW A FROG HIBERNATES.—"Curious": According to Simon Henry Sage, the frog does not hibernate in leaves or the trunks of trees, but in a dry hole in the ground not likely to freeze. He scratches the hole with his hind feet, and enters backwards. Once inside, there is apparently no trace of the fact outside. Frogs found under frozen leaves are still able to move about. Mr. Sage has found hibernating frogs with their extremities and skin frozen, but their vital organs were still intact, and they recovered their activity on being liberated.

THE BLOW OF A SEA-WAVE—"Yachtsman": An instrument has been made in England to be sent to Japan. Its use is to measure the blow of a wave. A similar apparatus was used to measure the wave-blow off the Skerryvore Rock, Scotland. There the waves sweep in from the wide Atlantic. In summer a force of over 600 pounds to the square foot was recorded. In winter as high as a ton to the square foot was attained. This gives an idea with what ships, lighthouses and other similar structures have to contend.

HAS THE SEA DESERTS?—"A. W. C.": An expedition has been organized in England for a new exploration of the Atlantic depths, with a view to settling the question whether life in the ocean is confined to belts near the surface and the bottom, or whether the intermediate zones are also inhabited. The steamship Oceana, fitted with new apparatus, including self-closing nets, is to carry the explorers.

HISTORICAL.

—Sir Isaac Newton, whose grand discovery of the law of gravitation resulted from the simple fact of his seeing an apple fall to the ground, was born on Christmas Day, 1642.

—King Edward III. of England was a great epicure, but a selfish one. While he gorged himself with a multitude of courses and dishes, he forbade his servants eating meat or fish more than once a day, and ordained by law that none of his subjects should have at dinner or supper more than two courses, nor above three dishes for each course.

—In 1776, General Washington celebrated Christmas Day by performing one of the most hazardous and most brilliant manœuvres in the annals of the war. Under cover of the night, he crossed the Delaware at McKonkey's Ferry, amid the perils of storm and ice, and marched his brave little army to Trenton, where, on the following morning, he completely surprised and routed the Hessians.

—"The first railroad run by steam" was not in this country, but in England, between London and Manchester. This was in 1830. The Baltimore & Ohio Railroad was running the same year, but steam was not put in as a motor until 1831, the cars being drawn by horses. The road then only ran from Baltimore to Ellicott Mills. There was a locomotive, however, built long before it was introduced in England, being the invention of Cuynet, in 1769, in France. A Scotchman named Symington invented a practical locomotive in Scotland in 1770. Oliver Evans of Philadelphia obtained the first patent granted for a locomotive in this country. He called it a steam wagon, but it was to all intents and purposes a locomotive, and, according to the patent office records, secured in 1787. The high pressure locomotive dates back to 1802, and an improvement on it in 1803.

GEMS OF THOUGHT.

....Happiness is not perfected until it is shared.—Jane Porter.

....It is a perilous thing to separate feeling from action, to have learned to feel rightly without acting rightly. Feeling is given to lead to action. If feeling be suffered to awake without passing into duty, the character becomes untrue —F. W. Robertson.

....The grand difficulty is to feel the reality of both worlds, so as to give each its due place in our thoughts and feelings, to keep our mind's eye and our heart's eye fixed on the land of promise without looking away from the road we are to travel toward it.—Augustus Hare.

....A man must not choose his neighbor. He must take his neighbor that God sends him. In him, whoever he be, lies hidden or revealed a beautiful brother. The neighbor is just the man who is next to you at the moment. This love of our neighbor is the only door out of the dungeon of self.—George MacDonald.

.... is all right to be open and above board in word and in action. Frank open heartedness is a characteristic greatly to be desired. But if we possess this excellent quality, let us not use it in a way that will offend others. It may be all right to speak plainly one's mind, if done at the proper time and place, yet it should always be done in a careful and polite manner. For remember that to be considerate of the feeling of others is also a virtue, and while observing one we should not forget the other.—The Search Light.

....Church and Bible and drill and creed we need and must have, but the real business is within; there is where we find God, there we feel his truth and grace and power, if anywhere. St. Paul by one brief word, told the truth in regard to the whole matter: "It pleased God to reveal his son *in me*," not *to*, but *in*. It is *within* that the revelations of God are made, and Christ is not a revelation even as he hangs upon the cross until he has been brought into the inner world where faith and love and spiritual vision lay hold of him.—T. T. Munger.

....It is possible that some time, when we see life in its completeness, we shall see just what God saw in the beginning—that it is good. And meanwhile, through trust in God, our thanksgiving should be as all-embracing as his love.—Christian Leader.

....Is there anything that pleases you more than to be trusted—to have even a little child look up into your face, and put out its hand to meet yours, and come to you confidingly? By so much as God is better than you are, by so much more does he love to be trusted.—Henry Van Dyke.

FARMS FOR SALE.

90-ACRE FARM 2 miles to village, 1 to station and post-office; overlooks large pond; 20 acres mowing, balance pasture and woodland, 300 cords wood, keeps 10 head stock, 100 bbls. Baldwins or more in season, nice grove, 2-story house, with sheds and carriage house, new barn 36x48 with cellar, with 25-ton silo, shingled sides all painted, 2 large poultry houses, one fitted for early chicks capacity 500 hens. Present owner has done a profitable chicken business; can run 10 h cows and poultry without interfering with each other. All buildings in first-class condition and farm also. Good place for farmer or summer resident. Price $3700: $1000, balance $300 year at 5 per cent.

CONN. FARM—Containing 13 acres all tillage land, story and half house with 2 barns adjacent, Buildings old but in first-class condition; good R. R. service to Hartford and N. Y. 40 rods from station; adapted for ordinary truck raising; apples, pears and small fruits. Price $2500. Address Collins & Reese 150 Nassau St., N. Y. or J. A. Willey 178 Devonshire St., Boston.

WORCESTER CO. FARM, with stock and tools included; 84 acres, land level, free from rocks, on main road, electrics to pass, 13 miles from Worcester, 1 mile to stores, station, post-office, churches and schools. House 2-story and ell, 10 rooms, nice lawn, fine shade front of house, pleasant location; small cottage for hired man. Barn 60x50, ell 40x30; piggery 15x60, with basement; hennery 12x24 ice house and wagon sheds; silos capacity 300 tons; 18 cows (Jersey stock), 2 bulls, 6 young stock, about 50 swine, 4 horses, 2 pair heavy harnesses, 1 pair light do., 1 express do., 1 light do., 1 double, 1 single wagon 1 horse cart and harness, Democrat carriage, 2-horse sled, 2 sleighs, sulky plow, manure spreader mowing machine, horse rake, tedder, potato and corn planter, seeder, W. A. Wood reaper and binder, McCormack corn harvester, 10 h. p. boiler and engine, ensilage cutter and carrier, grist-mill, all the small tools one can think of. Cream sold at the door for creamery, or milk can be sold in town. Here is an income payer. Price for all, $8000, part cash, balance 5 per cent, or will trade for smaller farm.

FRUIT AND STOCK FARM, 6 miles to Lowell 25 from Boston on county road. Farm contains 70 acres. 400 fine bearing apple trees, ¼ acre raspberries, 1 acre blackberries, 2 beds strawberries, 300 peach 3 and 4 yrs. old, besides other fruit. 2-story house 9 rooms, 2 large parlors, 4 light windows, piazzas and bay windows. Pump at sink, running water at barn. Well room with two set boilers. Barn 60x38; 16 tie ups and 3 stalls, fine cellar with 24 ft. space divided off for apple cellar; barn clapboarded and painted, cupola and vane. 2 henneries, 12x24 and 12x18. Two yrs supply of wood in shed. Cuts 35 tons of hay by machine. Price $6000.

DOUBLE VALUE in this 20 acre farm. Why? 1st. Because it is nine miles from Boston markets and is run as a market garden farm. 2nd. Every foot is valuable for building lots. Only two minutes to station, 40 trains daily; water, lights, and electrics through street. Large cottage house 12 rooms, steam heat; barn 42x60 with sub cellar; 75 ft. carriage shed, 300 feet frame for winter sash. Sold on very easy terms as a whole or in sections, or will exchange for property on the O. C. R. R. or in R. I. Personally examined.

ESTABLISHED CREAM and MILK Business supplying Fitchburg trade. Intervale farm 130 acres, finest of grass land all under drained, free from stone. All buildings built in 1895; house 12 rooms, painted white and blinded; ell and pantry, with refrigerator built in; 2 silos, 45 tons each. Stock barn 40x48, 18 ft. posts; creamery in one part, 20 tie ups and 4 stalls. Water from spring 20 ft. above buildings, running to house and barns (new pipe); hennery 20x20. Upland orchard, 300 apple trees, mostly Baldwins, 30 yrs. old; large variety other fruits, all kinds. Winter of '96 and '97 kept 24 head and 3 horses. Pond near house supplies farm with ice. 20 cans of cream per week are sold at $1 per can; a ready sale for all skim milk at 8c per can. Will sell 21 cows and pair horses, harnesses, farm wagon, one "Farmer's Handy Wagon," machine, hay rake, 3 harrows, plows, cultivators, 2-horse sled, sleigh, ex. wagon, all small tools for $5300; $2000 can remain at 5 per cent, or will sell farm above for $4500.

SUMMER BOARDING.—400 acres, situated in one of the pleasantest towns in central New Hampshire, well divided; cuts 50 tons hay, all by machine; keeps 25 to 30 head and team. Valuable wood and timber lot, large amount fruit. Two-story house 20 rooms in first-class condition, cemented cellar, milk cellar, ice house, 3 large barns, clapboarded and painted; carriage house 20x30. Running water at all buildings. Borders a beautiful lake for long distance. Fine shade trees. Summer rustic house. Low tax rate. Everything up in first class shape for country farm or summer boarding place, with a first class trade established. Good sugar orchard 200 buckets. Price $4500. Very easy terms. Only 1 mile to two villages. Where can you find a better bargain! E. H. CARROLL, Warner, N. H., or J. A. WILLEY, 178 Devonshire St.

IDEAL GENTLEMAN'S HOUSE—25 miles from Boston, excellent steam and electric service, 1 mile to P. O., Stores Churches and Schools. 30 acres level land free from rocks. Splendid set of buildings. 2-story house with ell, —10 finished rooms, painted white and recently shingled; sets back 500 ft. from main street where electrics pass (2 lines). Gravelled driveway lined with Maple and Linden trees on both sides leads to house; plenty shrubbery. Barn (painted and cupola) 33x47, 2-story shed 35x18, carriage and tool house 18x30, one poultry house 15x20, two others 8x10, another shed for storage of tools, etc., 16x9. Fine cold well of water, small apple orchard bearing well, another of young trees just begining to bear, buildings on an elevation 30 ft. higher than street. Keeping at present 8 head cattle and 2 horses. Price $6500, free and clear, one third can remain if desired.

SPECIAL INDUCEMENTS made to anyone buying this 40 acre farm, 23 miles from Boston, by contracting with them for any or all vegetables and fruits they will grow, thus assuring the purchaser a sure market for their crops. Buildings are located on high land, supplied with good spring water and consist of a large brick house of 12 rooms, barn and shed, ½ mile to school, 1½ mile to churches, stores and station. Land is suitably divided; buildings in good repair and surrounded by grand old elms and walnut trees. Eleven bushels of nuts taken from trees last year, on a main road, and an exceptionally good neighborhood. Price $2200.

FRUIT CRANKS READ THIS.—Situated within ½ mile of W. D. Hinds' celebrated Peach Orchards, that for several years past have been awarded the prize by the Mass. Horticultural Society as the best fruit garden in the State. Farm contains over 100 acres land, equally divided into tillage, pasture and wood land; land rolling and free from rocks; *especially adapted to fruit growing through this section, as it is above the frost line*; 1½ mile to Depot, 2 to Stores, P. Office and Church, ¼ to School; near good neighbors; keeps 7 head and 4 horses; silo 12x12; running water supplies buildings; 125 Apple, 30 Pear, 100 Peach Trees, 1 acre Strawberries, 1½ acre of Blackberries, (3000 qts. Blks. 100 crates Strawberries) 2½ story house, 9 rooms; good shade; barn 36x45, ell connects house and barn; new shop 20x24; 2 hen houses; all buildings in good condition. Price $3500. $1000. down. Apply to W. D. HINDS, Townsend, Mass., who will show it by appointment, or J. A. WILLEY, 10 & 12 Federal St., Boston.

STOCK FARM.—200 acres, 6 miles from cities of Lewiston and Auburn, Me., 2 miles from Poland Spring Hotel, ¾ to R. R. Station, P. O., Stores, etc. Land level, all worked by machinery, very fertile soil, buildings at junction of four roads. House 9 rooms connected by woodshed to large barn 110x55, tie ups for 80 head, running water before all stock; stable lathed and plastered, cellar bottom of flat stone, cement sides, water tight, 2 silos 60 and 120 tons each; barn No. 2 is 40x50 for tools, grain and threshing; all buildings in fine repair. Ice and cream house; 3 miles to one creamery 6 to another; teams pass door, milk now sold in Portland. 20 acres in orchard, grafted fruit, right in prime. Pastures all reseeded, furnish excellent feed, fences first class; great corn land, large amount grown for canneries; 1 within 1 mile 3 within three miles, farm now carries 30 milch cows, 4 horses, (pr. blk. mares 2400 lbs.) 6 swine, 50 fowls, sulky plow, 2h-corn planter (plants 2 rows at once) weeder, smoothing harrow, corn hoe, seed sower and harrower, 3 mowing machines, 2 or 3 horse rakes, tedder, horse pitch fork, 5-6 hay racks, several farm wagons, tip cart, cultivators, hoes, shovels, carts and sleds, 3 each, D. and S. harnesses, lead do. plow do., everything in way of small tools. Farm free and clear, will consider good property near Boston in exchange. Price $6000. Personal sold at appraisal. Recent death of owner reason why the widow desires to sell. One of the sons can be seen by appointment at this office. An excellent opportunity to procure a banner farm is here offered. J. A. WILLEY, 10 & 12 Federal. St., Boston.

GOOD FARM of 60 acres, divided in tillage pasture and wood land; fine land, 12 mile from Boston, 1¾ miles from R. Road, E. Car and P. Office, in a city of 15,000 inhabitant House with 11 rooms, all in good repair, with good cellar; large 2 story carriage house in rear Stable 40x70 ft., will keep 12 head of stock Price $6000. Address J. A. WILLEY, 10 & 12 Federal St., Boston.

28 ACRES FOR $2000.—Cottage house and ell, 7 rooms; 1 mile to Stores, Post Office, Station, etc. Water supply from fine spring; cuts 10 tons hay, can be made to cut more; good variety of all kinds fruit; only 24 miles from Boston and on a main road. Barn 18x24 with addition for stock, work shop, hennery for 200 fowls, note the price $2000.

NEVER BEFORE offered for sale; been in family 80 years; 1¼ mile from station on Fitchburg R. R., 25 miles from Boston. 35 acres tillage 30 pasture, 30 wood, keeping 15 head, 3 horses; 8 room house good repair, several fireplaces. Barn 86x30, with 18 tie-ups, 3 stalls; several other out-buildings. Cider mill, running order good repair, 25x15; good view of village 1¼ mile away; 350 apple, good variety, 12 cherry, 170 peach (just beginning to bear) 15 pear, 8 plum, 6 quince, 30 grapevines, ¼ acre strawberries (2 yrs. old) 1 acre asparagus. Price $4000 ½ cash; stock and tools at appraisal if wanted.

STOCK and GRASS FARM. 85 acres. One mile to station and P.O. 27 to Boston. House 9 rooms, barn 30x85, annex 22x55, shed and wagon house; all buildings painted and in good condition; well shaded; 500 peach, well fruited, 175 plum just beginning to bear, 75 bearing apple trees, 10 cows, pair horses, 50 fowls, all farming tools, crops, and 50 tons in barn. Price for all $6000.

CUTS NEARLY 100 TONS HAY, will pasture 20 to 25 head; running water in all buildings by pipe; 427 acres, finely located, everything in thrifty condition, hay having been spent on place. Quantities of apples, pears, plums and cherries; 1 mile to depot, P. O., stores; two other villages within 1¼ miles. Good two-story house, one barn 40x80, one 30x40, one 20x30; carriage house, 2 ells, other out-buildings. Borders handsome sheet of water ¾ mile. Price $4000, ½ cash, which is less than buildings cost. Large list of farms and village places, for particulars of which address E. H. CARROLL, Warner, N. H., or J. A. WILLEY, 178 Devonshire St., Boston.

TWO HUNDRED ACRE Connecticut River Farm. 80 acres in tillage; 60 of this being in one field. Perfect land; every foot tillable and very productive. 70 acres pasture, 50 wood and timber. 300,000 feet timber ready for market. Mill less than ½ mile of farm. Nice old style farm house, some 12 or 14 rooms. Barns 100x50 and 132x43 and connected; piggery 127x15. All newly painted and arranged in the most modern and convenient order. Cellar under entire barns, divided into four sections, running water in each section. Water to all buildings from two never failing springs. 150 ton silo. Stable fitted with the "Bidwell Adjustable Stall." Cuts 100 tons hay and fodder. Keeps 55 head cattle, 5 horses, 30 sheep and 50 swine. This farm is only four minutes from station; stores, churches, and schools near. This valuable property is offered with or without stock and tools. As a stock farm it cannot be excelled. Investigate this. Personally examined. Photograph at office of J. A. WILLEY.

LEVEL, FREE FROM ROCKS—¼ mile to stores, P. O., Schools and Church; barge passes door to meet every train. Splendid set of buildings, house of 8 or 9 rooms, connected to barn and all painted white, green blinds. Farm contains 40 acres, borders pond on back and has cottage which rents in summer for parties, and in fall to gunners Large strawberry bed, apple orchard of 200 bbls. in season. Price only $2800, and only 25 miles from Boston. Lake is ½ mile long, same wide. Photo. at Office.

ESSEX CO.—Farm 150 acres. 2 miles to Station. 1 mile to electrics; 30 acres English mowing, 45 pasture, 25 meadow balance woodland, cuts 50 tons hay, will easily cut 75 tons; milk sold at door; 80 apple trees, pears and peaches; good land. Watered by well, springs and aqueduct. House 2 story, 12 rooms in good order, Barns 36x60 and 32x40 with sheds, cornbarn, work shop, etc. Price $9000. Suitable for gentleman's farm or country residence, in town of low tax rate.

ILL HEALTH—Compels owner to sell this 27 acre village fruit and poultry farm, located in town known for its educational advantages. Farm is 30 rods from R. R. Station and ¼ mile to village. Attractive 2-story house of 13 rooms, bay windows, handsome lawn with fine shrubbery and shade trees; 8 ft cellar under whole house, (perfect for keeping fruit). Barn 33x40 with L 28x33; all buildings in best of condition and newly painted; on high land, sightly and healthy. Best of water in all buildings. Milk sold at door. 2½ miles to city of Marlboro, 15 to Worcester. Land is rolling, southerly slope, equally divided; cuts 20 tons hay, 100 ton silo, keeps at present 4 cows and 2 horses, but will carry a much larger stock, Poultry houses for 300 to 400 hens; main one 25x50, 2-stories; others are 12x18, 12x20, 10x30, in good repair. Fruit consists of 200 apple trees right in prime, mostly Baldwins and Hubbardstons.; 250 to 300 pear trees, largely Bartletts and Seckels; can exhibit 30 varieties. All trees in their prime, fancy prices for all fruits obtained as owner can show. ¼ acre raspberries, ¼ acre blackberries, ¼ acre strawberries; owner has an established trade for small fruit in village. This is without doubt one of the best places on the market today and is sold only because of the owner having met with an injury. In town of low tax rate, with money in bank to its credit. Will reserve a portion if all is not wanted. Photo. at my office.

J. A. WILLEY, Sole Agent,
178 Devonshire St., Boston, Mass

FARM OF 19 ACRES for sale, 26 miles from Boston, on the B. & A., and N. E. R. R., ½ mile from P. Office and School, to Churches and Stores 1½ miles; good buildings, 2 story house 7 rooms; good barn with cellar; will keep 6 head of cattle, Price $1800, $1000 cash, balance on mortgage. Electric R. R. within ½ mile, good place for the money.
J. A. WILLEY, 10 and 12 Federal St., Boston

SOUTH EASTERN N. H. FARM.—125 acres, 65 mowing and tillage, 60 pasture, wood for home use, land level, free from stones, clay subsoil, 10 acres underdrained, cuts 100 tons English hay, yearly. Tie ups for 35 head and 5 horses, best of never failing water house and barn, 160 Baldwins and russets in bearing; 400 bbls. in season, 50 young apple trees 5 years old, all varieties, pears, grapes and raspberries. Ice pond on farm, brook in pasture, 2½ story house painted and blinded, lawn and shade, shed and carriage house. Barn 90 x 40 with wing 50 x 36, ice house and hennery. Barn clapboarded and painted, all buildings in first-class condition, 1 mile to postoffice, stores, schools and churches, 1½ miles to one depot 3 miles to another, 50 to Boston on main line B. & M. Price $10,000.

24 MILES OUT.—7 acres land with personal property included. 1½ miles to Stores, Churches, Stations, etc. Soil a nice rich loam, 50 apple, pear, peach plum, cherry and quince Currants, raspberries, strawberries and grapes. 50 bbls. apples in season. Cottage house 7 finished rooms, in fine repair, new barn 24x30 with cellar can keep 5 head; 2 hen houses, accommodate 200 hens. 1 horse, cow, 2 pigs, 65 fowls, 2 seated carriage, top buggy, express wagon, hay wagon, tip cart, sleigh, sled, plows and all small farming tools. Price for all $1800.

ELECTRICS PASS DOOR.—24 miles out on Boston and Albany. ¾ mile from Post-Office, Stores, Station, Schools and Churches; cuts 20 tons English hay, will cut more; water supplied from fine spring by ram pump; good variety fruit. Large 2 story house, 11 finished rooms, carriage house and stable, barn and granary; all in good condition, first class neighborhood. Assessed for about $4000. Price $3500. $1000 down. Many other desirable estates can be shown same day.

PERSONAL INCLUDED.—Farm free and clear; 26 acres, will keep 4 or 5 head; 1¾ miles to Station, Stores, and P. O. Children taken at door for schools. Apples, pears, peaches, plums, asparagus bed, small fruits; 2 story house, 7 rooms, carriage house, barn with cellar, hennery, all in good condition. Fine rock maple shade; horse, cow, 30 or 40 fowls, democrat, sleigh, farm wagon, all small tools. All for $2500, half cash. 24 miles from Boston, main line; other farms shown same day.

FOR SALE.—The farm is situated in the south east part of Charlton, Worcester Co., Mass; 4 miles from Charlton Center, 4 miles from Southbrige, a town of 10,000 inhabitants, 2½ miles from Sandersdale Station, steam and electric cars, and 7 miles from Webster; 1 mile from school. Number of acres in farm 116, divided, 40 acres, of the very best mowing land, the rest is pasturing, wood and sprout land; never failing spring in pasture about 20 rods from the barn. Situated on a hill about 30 rods from the main road, commanding a very pleasant view, A large story and a half house of 8 large rooms, besides the halls, pantries, milk room and closets. Pump in kitchen. The house is painted white. Barn, main part 33x40 ft., 18 ft. posts with cellar and ell 24x30, conveniently arranged; can tie 20 cows and three horses, and will hold fodder enough to keep them through the winter. New hen house, 12x60, carriage house, ice-house, corn crib and other buildings. Pump in barn with never failing water. The insurance on these buildings will not expire for a year and a half. 14 cows, all in milk, extra good ones, giving from 16 to 26 quarts of milk per day: 4 heifers, 2 horses, about 5 fowls, wagons, plow, harrows, new mowing machine horse rake, and other farming tools, all in first class condition. 6 acres of corn, and all other crops, with hay enough to winter 20 head in fact everything I have. I will sell this property two different ways: The farm alone we will sell for $2000 or the whole for $3000.

MANY OTHER DESIRABLE FARMS for sale Any size, price or location desired—Address

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THE HORSE.

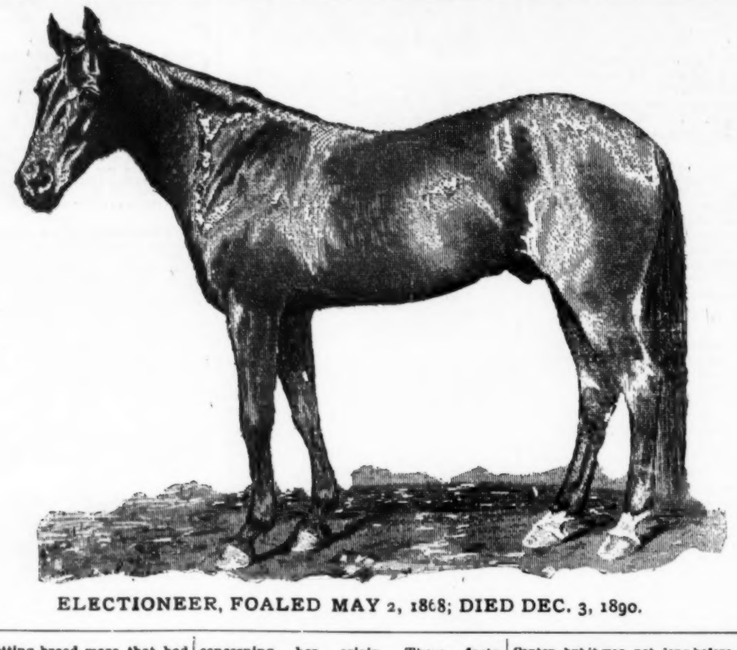
A Wonderful Sire of Trotters.

It has been said of noted men that "some are born great, others achieve greatness through their merits, by their own efforts, and still others have greatness thrust upon them." Horses are much like men in respect to greatness, excepting that instances of thrusting are less numerous since the decline of tin-cup records than formerly. Electioneer, whose likeness appears above, was not only born great, but he also achieved greatness through intrinsic merit.

Electioneer, as already remarked, was born great. He was by the greatest trotting sire, Rysdyk's Hambletonian, that the world had ever produced up to his time, 1849. His dam, Green Mountain Maid, was certainly remote cross of Messenger through the grandam of Young Bashaw, which gives him five crosses of Messenger, to one of Andrew Jackson, grandson of Imported Grand Bashaw.

Sayre's Harry Clay ranked quite high among the best brood-mare sires of this day, but the animals which gave his daughters their reputation as producers of trotting speed were got in most cases either by Rysdyk's Hambletonian, his sons or his grandsons.

The breeding of Shanghai Mary, the dam of Green Mountain Maid, has never been established. She was first discovered by some New York sheep dealers under somewhat peculiar circumstances in the State of Ohio. For several years we have believed that her sire was Irons' Cadmus. In the AMERICAN HORSE BREEDER of March 24, 1894, were given all the facts then known



ELECTIONEER, FOALED MAY 2, 1868; DIED DEC. 3, 1890.

the greatest trotting brood mare that had ever drawn breath up to the date she was foaled, 1862, if, indeed, a superior, all things considered, has ever been produced since then.

The breeding and history of Rysdyk's Hambletonian are so well known that it would be a waste of time and space to rehearse them. That his sire, Abdallah, was a natural trotter, and the most successful trotting sire of his day, no unprejudiced, well-posted horseman will dispute. It is well known, too, that his dam, the Charles Kent Mare, by imported Bellfounder, was a much faster trotter than Abdallah.

The history of Green Mountain Maid, though familiar to most horsemen, is not so well known to many as that of Rysdyk's Hambletonian. The following description of this wonderful mare is taken from an old catalogue of Stony Ford Farm, Charles Backman, proprietor.

Green Mountain Maid is a brown mare, 15 hands high, with a star in forehead and white ankles behind. She was foaled in 1862, was bred by Samuel Conklin of Middletown, Orange County, N. Y., and her sire was Harry Clay (2.29), by Cassius M. Clay Jr. (Neaves's), by Cassius M. Clay, son of Henry Clay. Her dam was Shanghai Mary, a mare which had many of the characteristics of Boston (sire of Sally Russell, grandam of Maud S.), and which all who ever studied her form and temperament agree was thoroughbred. She came from the West, possessed unflinching courage, and no road was too long for her. Harsh treatment in harness had taught her the habit of pulling on the bit, and yet she was timed a mile in 2.28, trotting.

When two years old, Green Mountain Maid passed into the hands of Elijah Dusenberry, then living near Middletown, and while owned by him she became famous as a lot trotter. The people would assemble in large numbers, station themselves in different parts of the paddock, and with the aid of a dog would set the mare going. She was never known to break from a trot, unless to kick at the dog barking at her heels, or she stepped in a hole. When she did break, it was only a bound or two. Quick as a flash she would recover and swing around the lot with faultless light-harness action.

The fall she was three years old she passed into the hands of D. B. Irwin of Middletown, who owned the first half-mile track in that part of Orange County. His stable bordered the track, around which the Maid, hooked double, was driven a few times. Just as she completed a circuit a dog rushed from the stable and gave chase. She was startled, and in kicking at him, as she had often kicked at the dog in the Dusenberry lot, she got her leg over the pole. After some trouble she was unhitched, deeply agitated, and Mr. Irwin never put harness on her again. She had inherited the blood-like form and the ambitious temperament of her dam, and Mr. Irwin bred her to Middletown, in the hope that the cares of maternity would make her, after her unfortunate and nerve-racking experience, more subject to control.

In the spring of 1866 I purchased her in foal for $450, and brought her to Stony Ford, where she now remains. While here she has always exhibited the same tendency to trot that she did at the weekly matinee. I have frequently noticed her in the field trotting faster than her companions could run. She also has given evidence of the great nerve force, the marked vitality, which characterized her youth in the hands of Messrs. Dusenberry and Irwin. Green Mountain Maid has been prolific in the stud, and has demonstrated her individuality and transmitting power by throwing performers to three different stallions, Hambletonian and two of his sons.

It seems from the above that Green Mountain Maid was a natural trotter. She was born great. Her greatness becomes more apparent every year by the success of her progeny upon the track. She was by a sire and from a dam that were developed trotters. Her sire, Sayre's Harry Clay, took a record of 2.29. He was got as Mr. Backman stated above, by Neaves's Cassius M. Clay Jr., and his dam was by the Norfolk trotter imported Bellfounder, sire of the dam of Rysdyk's Hambletonian.

Neaves's Cassius M. Clay Jr. was by old Cassius M. Clay, and the latter was by Henry Clay, the son of Andrew Jackson, that founded the Clay trotting family. The breeding of the dam of old Cassius M. Clay is not known. She was called Jersey Kate and produced the trotter John Anderson, record 2.41, two mile record 5.31.

Though Neaves's Cassius M. Clay traced directly in the paternal line to old Henry Clay, he was really bred much stronger in Messenger than in Bashaw or Clay lines. His dam was by Chancellor, and Chancellor was by Mambrino, the son of imported Messenger that got old Abdallah. The dam of Chancellor was a daughter of imported Messenger, making him closely inbred to that wonderful sire.

The second dam of Neaves's Cassius M. Clay Jr. was by Engineer 2d, the sire of the old-time trotting champion Lady Suffolk (2.29½). Engineer 2d was by Engineer, son of imported Messenger, and his dam was by Plato, another son of Messenger. Neaves's Cassius M. Clay also gets another

concerning her origin. These facts were copied mostly from Wallace's Monthly, and among them was the following letter written to the editor of the Monthly by Mr. W. G. Markham, then of Rochester, N. Y. Mr. Markham had interviewed Mr. Horton Wilcox, one of the two men who were in partnership in business, and brought Shanghai Mary from Ohio to New York State. Mr. Markham gives Mr. Wilcox's statement in regard to the mare as follows:

In August or September of the year, 1850, I, with my brother, took a flock of sheep into Ohio, and sold and traded them to farmers. Among the trades on my way out was one with Dr. Bonfield, about four miles south or west from Canton, O., with whom I traded sheep for a little mare partially blind. On my return from the West I stopped at Dr. Bonfield's for the little mare. She was not good to lead, and while getting her with my other horses into the road preparatory to starting, a young man came along riding a young sorrel mare. She was poor, with very little hair on her tail, apparently eaten off by calves. I asked the young man, whom I should say was about 25 years old, to lead the mare for me to Canton and leave her at the hotel stables, which he agreed to do. After starting he changed his saddle to my mare and led his own, and after going a little way he said:

"Stranger, maybe you would like to trade horses?"

"Yes," I replied, "I will trade, but you had better look to my mare's eyes before trading."

"Her eyes are good enough for me," retorted he.

"You have a good leather halter on your mare," I observed, "and if you will leave the halter on, when you get to Canton you can leave whichever mare you choose."

He rode on, and when I reached the stable at Canton I found the sorrel mare. She was three years old, had no shoes, and her feet were badly broken and sore; she was weary and had apparently traveled a long distance. I put her in with my lot of horses and led her through to Livonia, Livingston Co., N. Y. She was looking so badly that I was ashamed to bring her into town, and had her pastured with a neighbor about three miles away and left her there about six weeks, when a young man—Durits Ripley by name—wanted to buy a cheap horse. I drove with him down to the pasture and showed her. I asked him $50 for her. He said he would take her if I would take a yoke of steers at $40 toward payment, providing she would drive. He harnessed her up, but she wouldn't budge an inch. He finally said he thought he could break her, and paid me $10 and the steers and took her. He took her home and broke her to drive, and she made a very nice road animal.

The next spring she dropped a bay filly (which he afterwards sold to Charles Shepherd). He used her during the summer and sold her to Charles Shepherd of Avon, N. Y., for $75. Shepherd had her docked and pricked and put her in fine condition, and she proved a valuable roadster, fine stepper, and possessed great endurance. While in use he drove to Caledonia to Mr. Hotchkiss's hotel. Hotchkiss said as Shepherd drove up.

"Charley, what will you take for your mare?"

"Two hundred dollars," replied Shepherd.

Hotchkiss drew out his wallet, and, without the slightest hesitation, said:

"Here's your money."

Shepherd then said he had spoken hastily, and added:

"I don't want to sell the mare, and will give you $25 and say no more about it."

To which Hotchkiss replied:

"That is all very well, but she isn't yours to sell. She is my mare. Here is your money."

Shepherd took the money, and Hotchkiss took the mare. Hotchkiss kept her about a year, and sold her to Fred Harison, Angelica, N. Y., for $700, and Fred sold her after a time to Hiram Woodruff for $1400, since which I have known nothing personally of her history.

The bay filly which was afterward purchased by Charles Shepherd, and named Fanuelle, subsequently owned by his son Charles H. Shepherd of Avon, N. Y., was kept by him for breeding. She was about 15.2 or 15.3 hands high, and was a fine driving mare to buggy. She was never trained, but would show better than a 3.00 gait any time on the road. I remember several of her colts that trotted fast, one of which, Fanny Lee, I owned and bred to Narragansett and Alamods.

Following the quotations from Wallace's Monthly, or interspersed with them, we made the following remarks, giving our personal view of the matter. See AMERICAN HORSE BREEDER, March 24, 1887, page 315. It is the belief of the writer that if the pedigree of Shanghai Mary is ever brought to light, it will be found that she was by Irons' Cadmus, sire of the famous *Pocahontas* (2.17½). Iron's Cadmus also got Blanco, sire of the renowned trotting stallion Smuggler (2.15½). The BREEDER article with the above comments evidently came to the notice of Mr. Herschel I. Fisher of Lebanon, O., who contributed an article in the Christmas number of the Review for 1894, from which we extract the following:

"Away back in 1877 Mr. Wallace called attention to the resemblance between old Pocahontas and Shanghai Mary, and recorded his belief that if the breeding of Shanghai Mary was ever established it would be found that she was by Irons' Cadmus, and not of a mare by Jerry. The time was too short to permit of much correspondence before the Christmas number of the Horse Review went to press, and I was unable to fully identify Jerry. But, judging from the general character of Mr. Coffeen's stud, I expect to find that he was a thoroughbred, or at least a highly bred running horse.

The disappearance of a young man in southwestern Ohio, riding a sorrel mare with four white legs and a blaze in her face, leaving home after an estrangement serious enough to prevent his ever returning, the appearance of a young man of about the same age in eastern Ohio 250 or 300 miles away, the same fall, riding a mare of the same age and with the same peculiar coloring, and the fact that he did not seem disposed to talk about himself or the animal, make a chain of circumstantial evidence that in the absence of a single fact pointing in any other direction would convince most persons that the two fillies were one and the same. But when it is shown by competent witnesses that the southern Ohio filly had lost her tail, as is stated by Rev. Mr. Gallagher, and that the filly the boy rode in eastern Ohio looked like her tail had been eaten off by the calves, the presumption becomes very strong in favor of the theory that the footsore animal that Wilcox Bros. bought and took to New York State was the Cadmus filly Thaddeus Coffeen rode away the same summer.

Now we do not claim that the disappearance of a young man and a peculiarly marked three-year-old filly, by Iron's Cadmus, from Red Lion, O., and the appearance of a young man at Canton, O., some time afterwards, with a filly whose age, color and general description, even to the abbreviation of the tail, corresponds with the one which vanished at Red Lion, is proof positive that they were one and the same, but it furnishes good grounds for believing that they were. If the filly taken from Red Lion should turn out to be Shanghai Mary, there seems to be little room for doubt that she was by Irons' Cadmus.

We congratulate Mr. Fisher most heartily upon his success in bringing to light the facts contained in his interesting communication to the Review, and for which he is entitled to the gratitude of all who are interested in the trotting-breeding problem. We fear, however, that he does the late editor of the Monthly an unintentional injustice when he states that:

Away back in 1877 Mr. Wallace expressed his belief that if the breeding of Shanghai Mary was ever established it would be found that she was got by Irons' Cadmus.

We have never been able to find anything published by Mr. Wallace in any of the Monthlies which would lead any one to believe that he ever entertained such a thought. Had Mr. Fisher seen and carefully noted the article in the BREEDER of March 24, 1894, he would have observed that the extracts from the Monthly were enclosed in quotation marks, while the statement concerning the belief that Shanghai Mary was by Irons' Cadmus were not, but were the sentiments of the editor of the BREEDER. The facts brought out by Mr. Fisher strengthens the belief which we have long entertained that Shanghai Mary was by the same sire that got the invincible *Pocahontas* (2.17½), the mare which produced the grandsire of the ex champion Nelson (2.09), and also got Blanco

SHANGHAI MARY DAM, OF GREEN MOUNTAIN MAID.

clean and sound, his feet and legs remarkably good. He was what is termed a smoothly turned, well-finished horse of excellent quality.

He was a dark bay in color with hind feet and ankles white. He stood 15.2 hands high at the withers and 15.3 behind. He was a natural trotter with good all round action, and when at speed went well within himself. He was what is known as a line trotter, his hind action not being so wide as that of the Hambletonian trotters from American Star mares. He was never campaigned but was handled some for speed, and it is stated upon so good authority as that most successful trainer and reliable man Charles Marvin, who knew Electioneer better than did any other man, that the horse trotted quarters better than 35 seconds, and that to high wheels.

Electioneer was bred by Charles Backman, proprietor of Stony Ford Farm, and foaled his property May 2, 1868. He was one of 42 foals that resulted from Hambletonian's service of 1867, when he had 72 patrons. Hambletonian was then 18 years old. During the seven seasons preceding that in which he got Electioneer, the number of foals got by Hambletonian was 694, an average of about 96 per year. During the season of 1864 Hambletonian had 217 patrons. In 1865 the number was 193 and in 1866 it was 105. Electioneer was the second foal produced by Green Mountain Maid, and the only one which she ever had by Rysdyk's Hambletonian.

Electioneer was broken when three years old and was worked some to wagon for speed. Mr. Backman has stated that he timed the colt quarters to wagon in 38 seconds. Electioneer was kept at Stony Ford until the fall of 1876, when he was bought by the late ex-Gov. Leland Stanford, proprietor of the renowned Palo Alto establishment, Menlo Park, San Mateo Co., Cal., where he was kept till he died, Dec. 3, 1890. The price paid was $12,500. Green Mountain Maid then had but one in the 2.30 list. That was Prospero, whose record was then 2.22½. Previous to his purchase by ex-Governor Stanford, Electioneer had been used some for stock purposes at Stony Ford. It is stated upon authority of one who made careful investigation that the total number of foals which he got before being taken to California was about 40. These must all have been from trotting-bred dams, and Stony Ford then had the list of that kind which could be found on any breeding farm in the North. It is a singular fact that not one of the 40 ever took so fast a record as 2.30.

It was in 1877 that Electioneer made his first season in the stud at Palo Alto. From that season's service came Albert W. (2.20), Faith (2.23), Old Nick (2.23) and Fred Crocker (2.25½). The second season at Palo Alto, Electioneer got 10 trotters that took records of 2.30 or better. Following is a complete list of his sons and daughters that have taken records of 2.30 or better.

Arion (4)	2.07¾	Starlight	2.15¾
Sunol	2.08¼	Manzanita	2.16
Palo Alto	2.08¾	Anteeo	2.16½
Helena	2.11¼	Ladywell	2.16½
Peko	2.11¼	Amigo	2.16¾
Truman	2.12	Del Mar	2.16¾
Expressive (3)	2.12½	Bernal	2.17
Bellflower	2.12¾	Adair	2.17¼
Utility	2.13	Lee Slocum	2.17¼
Quality	2.13¼	Campbell's Elec'r	2.17¾
Conductor	2.14¼	Electricity	2.17¾
Norval	2.14¾	Montrose	2.18
Advertiser	2.15¼	Paola	2.18
Athena	2.15½	Ah There	2.19½
Expedition	2.15¾	Coin	2.19¾
Elwina	2.27¼	Electwood	2.29¼
Jim	2.27¼	Grace Lee	2.29¼
R. Electric	2.27½	Hernani	2.29¼
Emsline	2.27¾	Laura C	2.29¼
Lilemay	2.27¾	Belle Electric	2.29½
Minet	2.27¾	Cara Mia	2.29½
Whips	2.27½	Coquette	2.29¾
Sir Oatcrest	2.28	Eros	2.29¼
Sonoma	2.28	Ivy E	2.29½
Barnlit	2.28¼	Linnet	2.29½
Lisle	2.28¼	Miss Maude	2.29½
Pomona	2.28¼	Rockefeller	2.29½
Alma	2.28½	Don Montieth	2.29¾
Antinous	2.28½	Legal Tost	2.29¾
Belaire	2.28½	Rusenole	2.30
Cubic	2.28¼	Stella	2.30
Election	2.28½	Unique	2.30
Electrite	2.28½	Wildmay	2.30
Electrix	2.28½	Commotion	2.30
Kay neer	2.28½	Electress	2.30
Slight	2.28½	Gen. Wellington	2.30
Emma R	2.28¾	Golden Slippers	2.30
Alaska	2.29	Idella	2.30
Electro	2.29	Pacifica	2.30
Ella	2.29	Total, 138 trotters, 2 pacers.	
Elma Sontag	2.29		

It was only a few years ago that some turf writers predicted that Electioneer's sons would not breed on. Up to the present time not less than 88 of his sons have sired a total of 843 that have made records of 2.30 or better, 677 of which are trotters. His daughters, too, are coming rapidly to the front as producers. They are already credited with 81 performers, seven of which entered the list the past season.

Electioneer has surpassed any other of Rysdyk's Hambletonian's sons as a progenitor of world's champion trotters of all ages. He is represented in the list of champion trotters of all ages by Sunol (2.08¼).

In the table for Champion five year olds he is represented by Sunol (2.08¼).

In the champion four-year-old trotting table he is represented by Manzanita (2.16) and Sunol (2.10½).

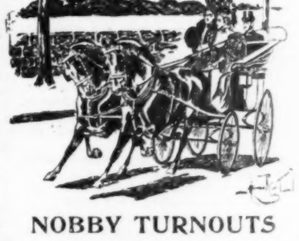
His descendants in the three year old champion table are Hinda Rose (2.19½), Sunol (2.10½), Arion (2.10½) and Fantasy (2.08¾).

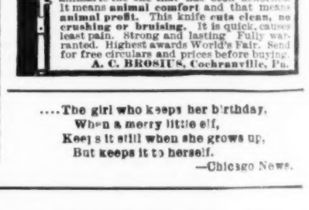
Four two year olds by him have made worlds champion records at that age, viz., Fred Crocker (2.25½), Wild Flower (2.21), Sunol (2.18) and Arion (2.10¾). The record of Arion has never been beaten or equalled by any other two year old trotter.

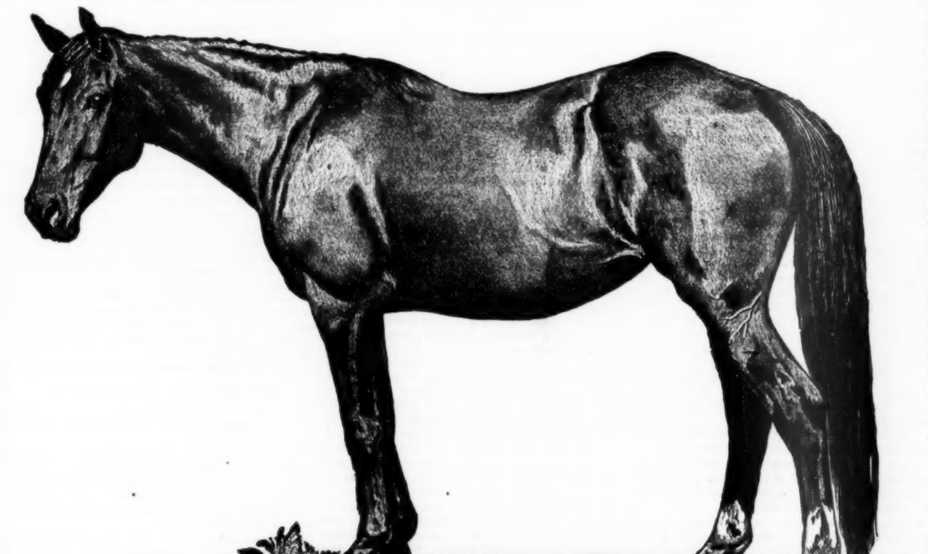
The table for champion yearling trotters also contains the names of four of Electioneer's descendants, two of which were by him, and the others by his sons Norval (2.14¾) and Advertiser (2.15½). They are as follows: Hinda Rose (2.36¼), Norlaine (2.31½), Bellbird (2.26¾) and Abbell (2.23).

Electioneer is represented in the champion trotting stallion table by Palo Alto (2.08¾), and his son Whips (2.27½) sired the champion trotting gelding Azote (2.04¾). The name of Electioneer is found in the pedigrees of not less than 31 trotters and pacers that have taken records of 2.10 or better.

Electioneer was born great. His sire and grandsire were great as progenitors of trotting speed. His dam and grandam, judged by what they produced and accomplished, were great mares. The wonderful qualities which he inherited from his distinguished ancestors, together with his fortunate location at Palo Alto, enabled him to attain such rank as a sire of 2.30 performers as no other stallion has yet reached.—American Horse Breeder.







GREEN MOUNTAIN MAID DAM, OF ELECTIONEER.

It may be well to say that I was led to consult Mr. Gallagher by the repeated assurance of the elderly men of the neighborhood that he knew more about the Coffeen horses than any other man now living, as he was not only a nephew, but the trusted lieutenant of Mr. Coffeen, and handled his horses for him in the early fifties. He was represented as being an enthusiast and a successful rider and trainer.

Mr. Gallagher, replying to an inquiry as to whether he recalled the filly, said he remembered her well; that she was by Irons' Cadmus, sire of old Pocahontas, and out of a mare by Jerry. The time was too short to permit of much correspondence before the Christmas number of the Horse Review went to press, and I was unable to fully identify Jerry. But, judging from the general character of Mr. Coffeen's stud, I expect to find which sired the ex-champion Smuggler (2.15½).

Green Mountain Maid, whose likeness appears above, and was first published Dec. 24, 1897, in the American Cultivator, the parent of the AMERICAN HORSE BREEDER, died June 6, 1888. She produced in all 16 foals, and was about to deliver her 17th at the time of her death. Nine of her foals have taken trotting records of 2.28½ or better. Their names and records are as follows, viz.: Dame Trot (2.20), Prospero (2.20), Elista (2.20½), Dame Trot (2.22), Lancelot (2.23), Mansfield (2.26), Storm (2.26½), Elaine (2.28) and Antonio (2.28½). Four of her sons have sired 2.30 trotters, viz: Antonio, Electioneer, Lancelot and Mansfield. Lancelot (2.23) was her last foal. He is owned at Allen Farm, Pittsfield, Mass. We once saw a number of youngsters by him exercised on the kindergarten track at the farm, and think we never saw a better-gaited lot of young trotters on any breeding farm.

Electioneer was a compactly built horse, which in conformation bore quite a strong resemblance to his sire. His head was of fair size and well developed in the region of the brain. His countenance was expressive of great intelligence. He had good shoulders, an excellent barrel, strong back and magnificent quarters, excelling at this point most of the famous trotting sires. His forearms and gaskins were heavily clothed with clean, firm muscles. His joints were

J. C. Simpson	2.18¼	Addie Lee 2d	2.23¾
Altivo	2.18½	Arol	2.24
Bonita	2.18½	Carrie C	2.24
Corsi	2.18½	Electric King	2.24
Pedlar	2.18½	Hogo	2.24
Regina	2.18½	Rexford	2.24
Rustique	2.18½	Electrician	2.24¼
Suisun	2.18½	Morea	2.24¼
Bell Boy	2.19¼	Clifton Bell	2.24½
Bow Bells	2.19¼	Electrondenton	2.24½
Antevolo	2.19½	St. Bel	2.24¾
Hinda Rose	2.19½	Aleck B	2.24¾
Reclant	2.19½	Electryon	2.24¾
Monaco	2.19½	Aldeana	2.25
Albert W	2.20	Clay	2.25
Axmoor	2.20	Dan	2.25
May King	2.20	Elector	2.25
Axmoor	2.20½	Fay	2.25
Sphinx	2.20½	*Solano*	2.25
Express	2.21	Colma	2.25¼
Gov. Stanford	2.21	Fred Crocker	2.25¼
Wildflower	2.21	Memento	2.25¼
Elector	2.21¼	Tiny	2.25¼
Eleneer	2.21½	Caution	2.25½
Bell Bird	2.22	Monterey	2.25½
Cecilian	2.22	Sweet Rose	2.25¾
Junio	2.22	Textile (Truman's Brother)	2.25¾
Belle Monte	2.22¼	Fowler Boy	2.26
Advance	2.22½	Ivo	2.26
Palo Alto Belle	2.22½	Laura R	2.26¼
Young Wildidie	2.22½	Veda	2 23¼
Egotist	2.22½	Arbutus	2.26½
Brilliant	2.23	Candidate	2.26½
El Benton	2.23	Leet	2.26½
Falita	2.23	Laraneer	2.26¾
Malden	2.23	Electuary	2.27¼
Old Nick	2.23	Mazatlan	2.26¾
Grover Clay	2.23¼	Attractive	2.27
Keneer	2.23¼	Kelloy	2.27
Gertrude Russell	2.23¼	Lucyneer	2.27
Marvin	2.23½	Mortimer	2.27
Peruvian Bitters	2.23½	Don Felix	2.27¼
Susette	2.23½		